CONSTRUCTION NEWS

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RAILWAYS.

(denotes that this work is advertised in Engineering News.)*

ALBANY & NORTHERN.—This road, connecting Albany, Ga., and Cordele, 36 miles, has been sold, according to press reports, to the Georgia Southwestern & Gulf, which will extend the line to Saint Andrews Bay, Fla., on the Gulf of Mexico. J. S. Crews is Gen. Mgr., A. & N. Ry., at Albany.

ARIZONA EASTERN.—New construction planned by this company, the incorporation of which was noted on Feb. 10, includes the following lines: (1) Commencing at a connection with the Southern Pacific System at or near Yuma, Ariz., thence in a general easterly direction to Phoenix, Ariz., a distance of about 160 miles.

(2) Commencing at a connection with Line No. 1 at Phoenix, thence in easterly and southeasterly direction through the territories of Arizona and New Mexico to a connection with the Southern Pacific at the town of Lordsburg, N. Mex., a distance of about 280 miles, about 250 miles being in Arizona and 30 miles in New Mexico.

(3) A branch from Line No. 2 commencing at the town of Solomonville, Ariz., thence in a southerly direction to a connection with the Southern Pacific at the station of Bowie, Ariz., a distance of 34.6 miles.

(4) A branch from Line No. 2, commencing at a point near the San Carlos Indian Agency, Ariz., thence in a northerly and northeasterly direction, via Talkiai, passing through Globe, Ariz., and through New Mexico to a point on the boundary line between New Mexico and Colorado, near the Las Animas River, a distance of approximately 428 miles; approximately 270 miles being in Arizona and 158 miles in New Mexico, with branches from this branch line as follows: (4a) Commencing at a point on Line No. 4 where it crosses the divide between the San Juan and Chusca Rivers, thence in a northeasterly direction to a point on the boundary line between Colorado and New Mexico, near La Plata River, a distance of approximately 35 miles. (4b) Commencing at a point on Line No. 4 at the station of Talkiai, Ariz., thence in a northeasterly direction to a point on the same line in the vicinity of the point where it intersects the boundary line between Arizona and New Mexico, a distance of approximately 200 miles. (4c) Commencing at a point on Line No. 4, at or near the junction of Bloody Tanks Wash with Pinal Creek, thence in a westerly direction up Bloody Tanks Wash and its tributaries, to the mining camp of Live Oaks; also other extensions and branches to other suitable points in the County of Gila, Ariz., a distance of approximately 20 miles. (4d) Commencing at a point on Line No. 4 at or near Globe, thence in a northerly direction to the Black Hawk Mine, thence in a southwesterly direction to a connection with Line No. 4 at or near the Old Dominion smelter at Globe, Ariz., a distance of approximately 16 miles.

(5) A branch from Line No. 2, commencing at a point in the County of Graham, Ariz., near the mouth of the San Francisco River, thence in a northeasterly and northerly direction, passing through the town of Clifton, Ariz., and into New Mexico, to a point on Line No. 4 between the towns of Farmington and Aztec, N. Mex., a distance of approximately 410 miles; approximately 65 miles being in Arizona and 345 miles in New Mexico.

Other new construction provided for includes a line from Cochise Station on the Southern Pacific to Douglas, 69 miles, with branches to Bisbee, Black Diamond, Gleeson and Turquoise; a branch from Mesa in a southerly and westerly direction to Hansen Junction, 14 miles; a branch from Florence to Casa Grande, 26 miles; a branch from a point between Florence and The Buttes to Superior, 25 miles; a branch up the San Pedro River from a point near Winkelman, to Benson, on the Southern Pacific, 80 miles. The total length of the new system is 1,877 miles.

BUCKHANNON & NORTHERN.—This company announces that it has not yet been definitely decided when construction will be started on the line from the west side of the Monongahela River in Pennsylvania at the West Virginia state line, southwest via Morgantown, W. Va., and Rivesville to Fairmont, about 35 miles. There will be a number of small bridges. J. T. Blair is Pres., and S. D. Brady, Ch. Engr., both at Parkersburg, W. Va. Officially noted on Feb. 3.

CHICAGO & ELMHURST.—Incorporated in Illinois, it is reported, with $5,000 capital. Offices will be in Chicago. The plans call for a line from Oak Park, Ill., westerly to the Township of Addison, in Du Page County, about 15 miles. The incorporators and directors include H. I. Williford, Jr., F. D. Kailmer, F. W. Pringle and H. L. Fearing, 135 Adams St., Chicago, and W. A. Ranson.

DELAWARE, LACKAWANNA & WESTERN.—We are officially informed that the M. P. McGRATH CONTRACTING CO., Trust Bldg., Easton, Pa., has secured the contract for fourth-tracking four miles of main line from Port Morris to Chester Junction, N. J.

G. J. Ray, Hoboken, N. J., Ch. Engr., advises us that the contract for grading work at the classification yards, Scranton, Pa., has under construction, and noted on Jan. 6, has been awarded to the JOHN F. DOLAN CONSTRUCTION CO., 170 Broadway, New York. The company intends installing automatic block signals between Chenango Forks and Cortland Junction, N. Y., and between Waterville and Utica, N. Y., this year.

GULF, COLORADO & SANTA FE.—Company has authorized the expenditure of $117,000 for improvements on the San Angelo branch which include the widening of roadbed between Temple and Brownwood, Tex., and revision of grade. As noted on Jan. 13, there is also an appropriation of $240,000 for ballasting this branch with rock, 52½ miles, between the same points. F. Merritt, Galveston, Tex., Ch. Engr., informs us that the embankment widening and change of line work on the San Angelo branch will be handled by contract. The ballasting is handled by the company's equipment and forces.

HAWKINSVILLE & WESTERN.—Officers have been elected as follows: T. B. Ragan, Pres.; J. J. Whitfield and J. K. Livingston, Vice-Presidents; H. E. Coates, Secy. and Treas. Other directors: E. B. Lewis, Judge Riley, C. C. Duncan, C. A. Horn, P. H. Lovejoy, J. J. Howard and M. T. Parsons. Headquarters, Hawkinsville, Ga. This company was recently incorporated to build a line in Georgia, as noted on Dec. 16.

LACLEDE, DALLAS & WESTERN.—Charter has been issued in Missouri to this company, which will build 30 miles of road in Laclede and Dallas Counties. The road will connect Phillipsburg with Buffalo, in Dallas County. It is capitalized at $600,000. The directors are: Sam T. McDermott, B. B. Joffee, W. F. Farren, C. W. German and C. M. Blackmar, all of Kansas City, Mo. The road will be used in the handling of timber and mine products.

LAKE SHORE & MICHIGAN SOUTHERN.—Surveys have been completed, it is stated, for a line running from Ashtabula, Ohio, to Carson and Youngstown, Ohio. Samuel Rockwell is Ch. Engr., Cleveland, Ohio.

NEW YORK CENTRAL LINES.—During 1910 New York Central lines will spend $2,206,000 for yards in Cleveland, Ohio, and surrounding territory if present plans for improvements are carried out, the necessary appropriations having been made. The shops at Collinwood, Ohio, are to be enlarged at a cost of $1,000,000, and a new passenger and freight station built at East 105th St., Cleveland.

SAN ANTONIO, RIO GRANDE & TAMPICO.—Company has been chartered in Texas, with headquarters at San Antonio. Capital stock, $90,000. Company proposes to construct and operate a line of railroad from San Antonio, through Bexar, Atascosa, McMullen and to the boundary of La Salle County, to a point between the Nueces and Frio Rivers, a distance of 90 miles. Incorporators: J. F. Edwards, St. Louis, Mo.; H. M. Aubrey, W. A. Cullen, A. L. Matlock, Henry C. King, Jr., Harry Heyman, San Antonio; A. G. Hedden, Plainfield, N. J.; G. Stuart Simons, Burt S. Harrison, George W. Nock, New York. This road is to be built to some point on the Rio Grande contiguous to Brownsville, in accordance with a contract between J. F. Edwards and the San Antonio Chamber of Commerce. The charter calls for but part of the line.

SOUTHERN PACIFIC.—Extensions and branches are to be built, according to press reports, on the following lines: California Northeastern Co., 90 miles; Oregon Eastern Railway Co., 150 miles; Modoc Northern Ry. Co., 80 miles; Goose Lake & Southern Co., 160 miles; Fernley & Larsen Railway Co., 120 miles. Company is reported to have appropriated $600,000 for betterments and new track on the Shasta division between Red Bluff, Cal., and Ashland, Ore.

TEXAS CENTRAL.—We are officially advised that this company is locating a branch leaving the main line at DeLeon, passing through the towns of Sipe Springs, Rising Star, Cross Plains, Tex., to an unlocated point about 15 miles west of Cross Plains, making the length of the branch 56 miles. The right-of-way has been secured, the ties and rails ordered, metal bridges contracted for, piling and timber trestle bridges being contracted for and the capital provided. The contract for the grading and bridging has not been let, but will be within the next few weeks to several different sub-contractors who have lately finished their work on the Santa Fe's Coleman cut-off. The company is running preliminary lines for an extension of 100 miles from Rotan, the present western terminus. Two preliminary lines have been run, one more trial line will be run, after which the permanent location will be made. Charles Hamilton, Waco, Tex., is Vice-Pres. and Gen. Mgr.; C. H. Sharman, Rutan, Tex., is Ch. Engr.

ELECTRIC RAILWAYS.

(denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—On Feb. 18, the Massachusetts Railroad Commission dismissed the petition of the Boston, Lowell & Lawrence Electric R. R. Co., finding that public convenience and necessity do not require the road. Commissioners George W. Bishop and Clinton White hold to the opinion they arrived at in 1907, when the first petition from this company was dismissed; but Walter Perley Hall, Chn., who succeeded former Chairman James F. Jackson in December 1907, subsequent to the issuance of the first order, dissents from the decision of his associates. He believes that the proposed interurban is needed. The company proposed to build an electric railroad between Boston, Lowell and Lawrence.

NEW YORK, N. Y.—Application for franchise rights to construct more than six miles of double-track surface lines through park property belonging to the city of New York was made to the Board of Estimate on Feb. 18. The proposed lines are in the Bronx, and are asked for by the Bronx Traction Co. and the Union Railway Co. Of the total length, 2,780 ft. are planned through Bronx Park, 12,300 ft. through Bronx and Pelham Parkways, and 16,600 ft. through Pelham Bay Park. The lines are proposed as extensions to others already operated by the companies, each of which applies for the right to build about half of the new track. Public hearing will be held on March 18.

LEBANON, PA.—We are officially advised that no contracts for the Ephrata & Lebanon St. Ry. will be let until capital is secured. As noted on Dec. 23, a "charter was granted on Dec. 15 to the Ephrata & Lebanon St. Ry. Co., to operate an electric line between Ephrata, Lancaster County, and Lebanon, 22½ miles. Capital, $425,000. The incorporators are S. T. Erb, Ephrata, Pres.; M. Kinport, Henry Westerhoff and Reuben Stine, of Ephrata; M. H. Shirk, S. S. Hamenstine and H. B. Hollinger, of Lincoln; J. E. Wolf and A. E. Lane, of Clay; Harry Bennetch, of Kleintersville, and U. B. Horst, of Schaefferstown. As officially noted on Nov. 18, 'company probably will let contracts for building its line about April 1, 1910. The line will be 23 miles long and will run from Ephrata to Clay, Hopeland, Kleintersville, Schaefferstown, Iowa and Lebanon. Preliminary survey has been made and right-of-way secured. S. T. Erb, Ephrata, is Pres.; F. H. Shaw is Ch. Engr., Lancaster, Pa.'" Noted also on Oct. 21, '09.

BRACKENRIDGE, PA.—Council has granted a 40-year franchise to the Tarentum, Brackenridge & Freeport St. Ry. Co. The streets over which the proposed line will pass are to be graded and lighted by the company.

ALLENTOWN, PA.—At a meeting of the Board of Directors of the Lehigh Valley Transit Co. last week arrangements were made for a special meeting of the stockholders on April 21 to approve a proposed increase of indebtedness from $9,000,000 to $15,000,000. The money will be used to refund the improvement bonds, defray consolidated mortgage bonds and provide for improvements and extensions. The company operates from Philadelphia north to Slatington and from Nazareth on the east to Macungie on the west. The money for improvements will go largely into new construction, in eliminating curves, stronger bridges, new rolling stock and general development. W. W. Wyor is Ch. Engr., Allentown Natl. Bank Bldg.

CLARKSBURG, W. VA.—The Fairmont & Clarksburg Traction Co. has surveys under way for the extension from Clarksburg to Weston. S. B. Miller is Ch. Engr., Fairmont, W. Va.

GREENVILLE, S. C.—Charter has been granted to the Spartanburg & Greenville Ry. Co. Capital stock of $100,000. The company proposes to operate an electric railway between the city of Greenville and the city of Spartanburg. The principal place of business of the company is to be at Greenville. The officers of the company are Chas. W. Ellis, Pres.; H. H. Price, Vice-Pres., and C. H. Yates, Secy. and Treas. The road is to be 31 miles in length. Commencing at the city of Greenville, the road will pass through the townships of Butler and Chick Springs, in Greenville County, and Spartanburg, in Spartanburg County. The railway will haul freight, passengers and mail.

GRIFFIN, GA.—B. R. Blakely, of Griffin, is interested in a plan to construct an electric railway in Griffin. A charter will be applied for soon.

ORLANDO, FLA.—Dr. G. T. Bennett, of Orlando, and others, are reported to be interested in a plan for building an electric railway from Kissimmee via Orlando to Sanford, Fla. The Board of Trade at Kissimmee, is also interested.

DAYTON, OHIO.—The Cincinnati, Dayton & Fort Wayne Ry. Co. has plans under way for beginning construction, probably this spring, on the line which will connect the places named in its title. The railway will be about 195 miles long. Sam. F. Glover, Davies Bldg., Dayton, is Pres. and Gen. Mgr.

CLEVELAND, OHIO.—It is announced that the Municipal Traction Co. (The Cleveland Ry. Co.) will build a new cross-town line on the West Side in connection with the general plant of improvements to cost over $3,000,000. Of this sum, about $1,000,000 will be spent for new tracks. Noted on Dec. 23, 1909. W. T. Cook is Supt., 620 Electric Bldg., Cleveland.

PORTLAND, IND.—The City Council has granted the new franchise asked by the Ft. Wayne & Springfield Railway Co., for an extension of its traction line from Decatur to Portland. By its terms, the franchise provides that the company, should the city decide to pave any of the streets occupied by it, shall pave and keep in repair that portion between its rails. The speed limit fixed is 20 miles an hour in the residence district and twelve miles through the business portion of the city. W. H. Fledderjohann is Pres. and Gen. Mgr., Studebaker Block, Decatur, Ind.

LANSING, MICH.—The Lansing & Northeastern Elec. Ry. Co. has been incorporated in Michigan, with $500,000 capital, to build electric lines in eastern Michigan. The first line to be built will be from Lansing northeast to Owosso, about 30 miles. This section probably will be finished by October 1. The route from Lansing parallels the Grand Trunk Ry. to Morrice, then runs north to Owosso. An extension is projected from Morrice east through Durand, thence northeast to Flint. An extension is also projected from Owosso, northeast to Saginaw. The incorporators include: G. G. Moore, K. Lathrop and S. W. Ladd, Detroit, and T. W. Atwood, Cairo. All the incorporators are said to be interested in the Michigan United Railways Co., of Lansing.

SPRINGFIELD, ILL.—The Illinois Traction System will spend $10,000 in improvements of its Springfield terminals during the coming year, according to H. E. Chubbuck, Vice-Pres. and Gen. Mgr., Peoria, Ill.

DAVENPORT, IOWA.—The Davenport & Muscatine Ry. Co. has been chartered in Iowa to build an electric railway between Davenport and Muscatine. Capital stock, $100,000. J. F. Porter is Pres.; J. R. Lane, Vice-Pres., and H. E. Weeks, Secy. and Treas. Directors: John G. Huntoon and R. R. Lane.

OMAHA, NEB.—The Nebraska Transportation Co., which plans to build an electric line connecting Omaha and Fremont, has applied for a franchise to the City Council of Fremont. It is proposed to begin construction soon. C. W. Baker is Pres., Omaha. Previously noted.

KALISPELL, MONT.—The Whitefish & Polson Eletcric Ry. Co. has started the preliminary survey for its projected electric railway from Kalispell northward to Whitefish and southward through Somers to Polson on the west shore of Flathead Lake. The incorporators include G. H. Adams, J. H. Stevens, Peter Nilson, and others, as noted on Jan. 13.

MEXICO, MO.—Construction has been started on the new Mexico, Santa Fe & Perry Electric Railroad by J. J. BURNS, Isabella Bldg., Chicago. The power-house has been built on Salt River north of this city. The work of putting in the machinery is under way. As noted on Dec. 16, '09, this line is to extend from Mexico to Columbia and Fulton, and north to Santa Fe, Perry and Hannibal, a total of 103 miles. Burns & Co. will purchase all material and let all subcontracts.

SPRINGFIELD, MO.—F. C. Yentsch, of Mount Vernon, Mo., is interested in the organization of a company to build an interurban railroad from Springfield to Carthage. The route of the road, according to Mr. Yentsch, will be from Springfield to Haseltine, Nichols, Halltown, Paris Springs, Mount Vernon, Hoberg, Stotts City and Carthage, a distance of about 60 miles.

CHICKASHA, OKLA.—The Chickasha St. Ry. Co. has been incorporated in Oklahoma to construct a 6-mile electric railway in Chickasha, Grady County. Capital stock, $150,000. Directors: Charles F. Woodward and W. Raymond Emerson, of Wakefield, Mass.; Lawrence Martin, R. D. Welborne and W. P. Weston, of Chickasha.

KENT, WASH.—The Valley Ry. & Power Co. announces that it has not yet definitely decided when it will begin work on its proposed 7-mile railway between Kent and Renton. Work will be started probably about Aug. 1. The project is being financed entirely by local capital. The motive power has not yet been determined upon. Capital stock, $300,000. H. B. Madison, Kent is Pres.; Robert Bridges, Orillia, Vice-Pres.; Isaac P. Calhoun, Kent, Secy.; Thomas Chipman, O'Brien, Treas.; A. T. West, Seattle, Gen. Mgr.; A. S. Leeper, Kent, Ch. Engr. Noted last week under Renton, Wash.

ALBANY, ORE.—The Albany Interurban Ry. Co. has been chartered in Oregon to build an electric railway from Albany to Sweet Home via Lebanon, Brownsville and

Holley. Capital stock, $25,000. Incorporators: P. A. Young, C. E. Sax and J. F. Hawkins, of Albany.

LOCKEFORD, CAL.—The Lockeford Chamber of Commerce is interested in organization of a company to build an electric line to Stockton unless other arrangements can be made to connect Lockeford with Stockton, via Tokay Colony. W. B. Ambrose is Pres.

SAN RAFAEL, CAL.—A project is being considered by the Chamber of Commerce to construct an electric railway from Ross Valley through San Rafael to McNear's Point. E. B. McNear and D. W. Martens are interested.

SAN DIEGO, CAL.—The San Diego, El Cajon & Escondido Ry. Co. has secured capital, it is stated, for its proposed electric line from San Diego, Cal., north to Escondido, about 40 miles. Contracts for the work probably will be let soon. F. M. Fairchild is Ch. Engr., Oakland, Cal. As noted on Oct. 28, '09, this company was incorporated to build an electric railway to connect San Diego, La Mesa, El Cajon, Bostonia, Lakeside, Morton, San Pasquel, Bernardo and Escondido, 65 miles. Surveys have been completed. Headquarters, San Diego. Capital stock, $2,500,000. Incorporators: G. W. Pursell, H. G. Crowe and A. C. Riordan, San Diego; W. L. Ramey and C. O'Kelly, Escondido, and William Steil and C. O. Nichols, El Cajon. Noted fully on Sept. 9, '09.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

RUTLAND VT.—The RUTLAND RAILWAY, LIGHT & POWER CO. has been awarded contract by the Penrhyn Slate Co., of Fair Haven, to furnish electricity to operate the new mill the company is erecting in Hydeville. Service will be furnished from the Carvers Falls plant.

HOLYOKE, MASS.—The Lighting Department has applied to the Board of Aldermen for an appropriation of $125,000 for further additions to the lighting department. Of this sum $100,000 is for the electric light plant. W. H. Snow, Mgr., recommends the installation of four new boilers with stokers and replacing the present 500-KW. generator with a 2,500-KW. generator with its accessories of condensers and pumps.

UXBRIDGE, MASS.—The Uxbridge & Northbridge Electric Co. is planning to enlarge its power plant to meet the increase in demand for electrical service. Work will include an addition to the power house, the installation of a 500-KW., 3-phase turbo-generator set, for which contract has been let, and a new switchboard and transformer.

TURNERS FALLS, MASS.—The Turners Falls Co. is preparing to double the output of its plant by the installation of a 1,000-KW. alternating-current generator and hydraulic turbine, together with auxiliary apparatus.

WEST BOYLSTON, MASS.—Contract for the construction of the municipal electric light plant has been awarded by the Selectmen to the DELTA ELECTRIC CO., of Worcester, Mass., at $13,479. Work includes the construction of pole lines and substation, work to be completed by July 1, 1910.

WEST MANSFIELD, MASS.—The Massachusetts Coal & Power Co. is preparing to construct a new plant in West Mansfield, for which equipment will be required in about six months. Equipment includes a Corliss engine, generator, hoisting engine and coal-handling machinery.

GLOUCESTER, MASS.—Contract for the construction of a lighting plant has been awarded by the city to the B. F. STURTEVANT CO., 34 Oliver St., Boston, Mass. F. F. Wonson is Clk.

WINDSOR, CONN.—The Selectmen have been empowered to make a contract with the HARTFORD ELECTRIC LIGHT CO., of Hartford, for furnishing 167 60-c. p. lamps of the Tungsten type. These will be installed at once.

HUDSON, N. Y.—The bids received by the State Commission in Lunacy, Albany, on Feb. 16, for power equipment at the Hudson River State Hospital, at Hudson, were: L. F. Bannon, Kingston, N. Y., $114,888; Edward Joy Co., Syracuse, N. Y., $112,500; Gaylord & Eitepenn Co., Binghamton, N. Y., $95,873; E. Rutzler Co., 404 E. 40th St., New York, $109,182; E. P. Bates, Syracuse, N. Y., $130,330; Northeastern Construction Co., Brunswick Bldg., New York, $114,850; Lord Construction Co., 213 W. 40th St., New York, $121,500; W. B. Armstrong, 22 Plain St., Albany, N. Y., $98,340.

JERSEY CITY, N. J.—The Public Service Corporation of New Jersey has awarded contract to WESTINGHOUSE ELECTRIC & MFG. CO., 165 Broadway, New York, and to the GENERAL ELECTRIC CO., Schenectady, N. Y., for machinery. Estimated cost, $500,000.

ALLENTOWN, PA.—The Morgan Portland Cement Co. is considering plans for the installation of machinery for a 2,000-bbl. plant and provision will also be made for a 2,000-KW. power plant, the equipment of which has not yet been decided upon.

WILMINGTON, DEL.—Contract for furnishing incandescent electric lights has been awarded to the WILMINGTON CITY ELECTRIC CO., at $15 per lamp per year.

LYNCHBURG, VA.—Clem S. Leftwich, of Greensboro, N. C., is considering plans for the construction of a hydro-electric power plant on James River at Judith's dam, four miles from here, where it is estimated that from 2,000 to 2,500 HP. can be developed. Electricity generated at the plant will be transmitted to Lynchburg.

MILLVILE, W. VA.—Bids are asked until Feb. 26 for the steam power plant for the Winchester & Washington City Ry. Co., Winchester, at Millville, W. Va. P. O. Keilholtz is Consulting Engr., Continental Bldg., Baltimore, Md.

The Winchester & Washington Ry. Co., Winchester, Va., has awarded contract to the WESTINGHOUSE ELECTRIC & MFG. CO., Bank of Commerce Bldg., Pittsburg, Pa., for turbines and electric generator for its steam power plant on Shenandoah River, at Millville, at $50,000. The plant will be used as an auxiliary to the hydro-electric power plant.

GENTRY, W. VA.—The New River & Pocahontas Consolidated Coal Co. is contemplating the installation of a 1,500-HP. steam turbo-generator set, together with auxiliary apparatus in its power house. The company, it is reported, will purchase a large supply of electrical mining tools and coal-handling machinery during the year.

RALEIGH, N. C.—The Carolina Light & Power Co. will spend $175,000 for improvements and additions to its plant, including extension of power house, erection of car barn, installation of two 100-HP. boilers, 2,500-KW. turbine generator, automatic stokers, coal and ash handling equipment, etc.

EASLEY, S. C.—The SOUTHERN POWER CO., Charlotte, N. C., has been awarded contract by the Easley Cotton Mills for furnishing electricity to supplement the present power facilities for operating the mills and also for lamps for the mill village. Contract calls for 250 HP. or more. A transmission line will be erected from Greenville to Easley to furnish electricity for the service.

OLIVER, GA.—The Oliver Electric Power Co., lately incorporated, is planning to construct a power plant here. Estimated cost, about $15,000. D. G. Zeigler & Co., of Jacksonville, Fla., are Engrs.

WILLACOOCHIE, GA.—Contract for the construction of the municipal electric light plant has been awarded to J. B. McCRARY & CO., of Atlanta, Ga.

ROANOKE, ALA.—The city has purchased a water power site with 75-ft. fall, seven miles north of the city, and proposes to develop about 150-KW. to operate the municipal electric light system. Motor-driven centrifugal pumps and filtering plant will probably be installed at the municipal waterworks system. W. Oscar Orr is Supt.

SPEIGNER, ALA.—Bids are asked by the State Convict Bureau of Alabama until Feb. 26 for furnishing generators, turbines, headgates, flood-gates, crane, governors, etc., for proposed hydro-electric plant at Speigner. Edgar B. Kay is Engr., University of Alabama, University, Ala.

BRIDGEPORT, ALA.—The Bridgeport Electric & Railway Co. is having plans prepared for a power plant, bids for which will soon be asked. Equipment will include a 350-HP. boiler plant, engine, 200-KW. generator, exciter, switchboard and other apparatus.

RULEVILLE, MISS.—The city has contracted with the SOUTHERN POWER CO., Charlotte, N. C., to furnish electricity for lighting streets and residences, city to purchase power and install lights and lighting apparatus.

HUNTINGTON, TENN.—The city has voted $10,000 of bonds for extending electric lights to East End.

NASHVILLE, TENN.—An appropriation of $50,000 has been made for the installation of a central heating and lighting plant and other improvements at the Fisk University. George A. Gates is Pres.

COLUMBUS, IND.—Contract for improvements to the plant of Central Indiana Lighting Co. has been awarded to WESTINGHOUSE, CHURCH, KERR & CO., 10 Bridge St., New York.

INDIANAPOLIS, IND.—Contract to light and heat the public comfort station, under construction at the intersection of Kentucky Ave. and Illinois St., has been awarded to the MERCHANTS' HEAT & LIGHT CO. on a bid of 3 cts per KW. hour for lights and 40 cts. per 1,000 lbs. condensation for steam heat, with a maximum charge of 20 cts a cu. ft. of radiation a season. It was estimated that the maximum charge for heating will be $34.20 a season. The Indianapolis Light & Heat Co. submitted a similar proposal for lights, but asked $49 a season for heat.

KALAMAZOO, MICH.—The Commonwealth Power Co. is making arrangements to erect a large power plant here, a site for which has been purchased. The proposed plant will be steam driven, and will furnish electricity for operating the Michigan United Railways and for lamps and motors in Kalamazoo, Battle Creek and a number of small towns. J. B. Foote, of Jackson, Mich., is General Mgr.

KANKAKEE, ILL.—The construction of a large dam and hydro-electric power plant on the Kankakee River in Wilmington, about two miles below the Kankakee County line, is under consideration by A. N. Powers, promoter of the Illinois Light & Power Co. Applications have been made for 50-year franchises in Bourbonnais, Bradley and Kankakee to furnish electricity for lamps and motors.

CHICAGO, ILL.—The Madison Light Co., of Chicago, has applied to the City Council for a franchise to construct and operate a system for the transmission and distribution of electricity and steam in the territory bounded by Randolph, Madison, Dearborn and Clinton Sts. The company plans to install a plant in the basement of the new building to be erected at the corner of Market and Madison Sts. by William R. Hearst.

BATAVIA, ILL.—The Aurora, Elgin & Chicago Ry. Co. has announced plans for the enlarging of the power house at Batavia. They include the enlarging of the present house to nearly twice its present size and the increase of the power from 6,000 KW. to 8,000 KW. The addition will be at the north of the building and will be 40 ft. square and the material to be used will be sandstone. Four new 500-HP. engines will be added, together with the other necessary machinery.

MARSHALLTOWN, IOWA.—Marshalltown will soon be lighted and supplied with power for industrial and railway service by a 500-KW. Westinghouse turbine generator set which the Marshalltown Light, Heat & Ry. Co. is installing in its local plant. The turbine is of the high-pressure type, employing steam at 125 lbs. pressure, and exhausting into a 26-in. vacuum maintained by a barometric condenser and cooling tower equipment.

GRAND JUNCTION, IOWA.—The G. W. Nicholson Co., owner of the local electric light plant, contemplates installing an entire new plant this coming spring. Wilbur W. Wertz is Secy. and Mgr.

BOONE, IOWA.—Col. E. G. Pratt, of the Boone Gas Co., has let contract for the new Ames gas plant to the AMERICAN CONSTRUCTION CO., of Newton.

MAZEPPA, MINN.—The Zumbro Power Co. is considering plans for the construction of a dam 50 ft. high across the Zumbro River and the installation of hydro-electric power plant in the towns of Mazeppa and Zumbro.

INTERNATIONAL FALLS, MINN.—Contract for installing electric fixtures in the new court house has been awarded to CHARLES WILKINS & CO., of Minneapolis, Minn.

GILBERT, MINN.—The citizens have voted to issue bonds for $15,000 for completing the lighting and water systems.

ASHLAND, KAN.—See item under Water Supply Irrigation.

LEWISTOWN, MONT.—Bids will be received about April 1 for the construction of the proposed. electric light plant. J. L Bright is Pres. Estimated cost, $150,000.

SMITHVILLE, MO.—Contract for rebuilding the plant of the Smithville Electric Light Co. has been awarded to HARRY WELDIN. Equipment will include crude oil engines, one 75-KW., 3-phase, 1,100-volt generator and 25-KW. step-up transformer. Harry Gordon is Mgr., Smithville Electric Light Co.

HUNTSVILLE, TEX.—The Huntsville Light & Power Co., which recently bought the holdings of the Huntsville Electric Light & Ice Co., have closed a contract with the FAIRBANKS, MORSE CO. for a gas producer plant and dynamo. Texas lignite will be used. The new company will immediately remodel the old buildings, making them as near fireproof as possible. The work will be completed by April 1, at which time the contract calls for the delivery of the machinery.

SPOKANE, WASH.—Plans are being prepared by the Big Bend Water Power Co. of Spokane, for the construction of a 6,000-HP. hydroelectric power plant on the Spokane River. Work will begin soon.

The Spokane Railway & Power Co., capitalized at $2,000,000, has filed articles of incorporation to build a plant to develop between 30,000 and 35,000 HP. in the Spokane River, 30 miles below Spokane. The plant will cost $1,500,000, and is to be in operation within two years. The incorporators are: D. M. Drumheller and Alfred Coolidge of the Traders' National Bank and H. L. Moody, a local capitalist, the latter being president of the company. A dam will be built at a point on the Spokane River near the [illegible]e Pray bridge.

OAKLAND, CAL.—The San Francisco, Oakland & San Jose Ry. Co. has awarded contract to the GENERAL ELECTRIC CO., Schenectady, N. Y., for a 2,700-KW. generator to be direct-connected to a Hamilton-Corliss engine furnished by CHARLES C. MOORE & CO.

SANTA CRUZ, CAL.—The City Council has adopted a resolution providing for municipal improvements, including the installation of a new lighting plant, reservoir, extension to water-works system, chemical fire engine, street improvements, etc. Estimated cost, $160,000.

MARYSVILLE, CAL.—The Pacific Gas & Electric Co. has decided to build a tunnel under the mountains to take the place of about five miles of ditch and flume in connection with its hydro-electric power plant at Colgate. The tunnel will be between two and three miles long.

LOS ANGELES, CAL.—The Pacific Light & Power Co., lately re-incorporated with a capital stock of $40,000,000, proposes to enlarge several of its plants to meet increasing demands for electrical service. The output of the plant at Redondo will be doubled at a cost of $1,750,000. The present equipment of the plant includes three units of 7,500-HP. each, and it is proposed to install three additional 7,500-HP. units. The company also proposes to develop more power on the Kern River, and to run new lines and build new plants in the mountains. W. G. Kirchoff is interested.

DIXIE, IDAHO.—S. R. Gayton, of Philadelphia, Pa., and of the Penn-Dixie Mining Co., who has purchased the Dixie townsite, is contemplating the installation of an electric light plant during the coming summer.

SHERBROOKE, QUE.—The St. George Electric Co. of this city, will build a new concrete dam and electric plant on the Chaudiere River. Estimated cost, $75,000. J. W. Gregoire, is Secy.-Treas.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

NASHUA, N. H.—Plans are being prepared for the construction of a bridge to replace the present one at Taylor's Falls. E. O. Hathaway is City Engr.

BUFFALO, N. Y.—Bids will be received until Feb. 26 by the Grade Crossing Commission for masonry, paving and other work necessary for the construction of the viaduct and approaches in Bailey Ave. over the tracks of the West Shore R. R. Edward B. Guthrie is Ch. Engr.

SYRACUSE, N. Y.—Bids will probably be asked early in the spring for the construction of a bridge over Onondaiga Creek at Dickerson St. Estimated cost, about $11,000.

CALEDONIA, N. Y.—Bids will [illegible] received until March 3, by W. L. Piece, [illegible]wn Clk., for the construction of a bridg[illegible]ver the Genesee River. Estimated cost, $[illegible]00.

*RYE, N. Y.—We are officially [illegible]sed that KENNEDY & EASTON, of Alba[illegible] N. Y., have been awarded contract f[illegible]he construction of a concrete bridge at [illegible] Bids were opened on Feb. 16, by t[illegible] village. Cuyler W. Lush is Engr.

NEW YORK, N. Y.—Bids are [illegible]d until 3 p. m., March 3, by the Park [illegible]ard for furnishing all the labor and m[illegible]rial for completely erecting a foot brid[illegible] at the falls, near Lorillard mansion, in B[illegible]x Park, City of New York.

Bids are asked by Kingsley [illegible] Martin, Bridge Comr., until 2 p. m., Ma[illegible] 3, for furnishing and delivering yellow [illegible], white pine and spruce lumber to the [illegible]rooklyn Bridge.

BRIDGETON, N. J.—The Park C[illegible]mission has awarded contract to OGDEN [illegible]PLAT[illegible], Bridgeton, for constructing tw[illegible] bridges across the Raceway at $3,376.

PLYMOUTH, PA.—We are offi[illegible]ly advised that the County Commiss[illegible]rs of Luzerne County, have retained th[illegible] Scofield Engineering Co., Arcade Bldg., Ph[illegible]elphia, to prepare plans for the bridge [illegible]e constructed over the Susquehanna [illegible]ver at Plymouth.

SCRANTON, PA.—Plans for the [illegible]nstruction of the Mulberry St. viaduct [illegible]l soon be completed. Estimated cost, $24[illegible]0.

*READING, PA.—Ten bids were o[illegible]ned on Feb. 10 by A. L. Rhoades, County [illegible]ntroller, for the erection of a reinforced [illegible]ncrete arch bridge over Wyomissing C[illegible]k in Cumru Township, Berks County, k[illegible]own as Ruth's bridge. Contract has been awarded to WILLAUER & CO, of Pottstown, Pa., at $5,108.

WILLIAMSPORT, MD.—The Wa[illegible]ngton & Berkeley Bridge Co. has applied to the Legislature for authority to cons[illegible]ruct a bridge over the Potomac River, anoth[illegible]r over Chesapeake & Ohio Canal and one over the tracks of the Western Maryland R. R.

WASHINGTON, D. C.—The President has approved the following bridge bills: An act to legalize the construction of a bridge across the Mississippi River at Hill City, Minn.; an act to authorize the city of Minneapolis, Minn., to construct a bridge across the Mississippi River in said city; an act to authorize the Union R. R. & Dock Co. to construct and operated a bridge across the Mon[illegible]gahela River in the State of West Virginia.

PARKERSBURG, W. VA.—Wood County Commissioners will construct a bridge across the Ohio River at Juliana St. Estimated cost, $65,000.

COLUMBUS, GA.—The city has voted $100,000 of bonds for constructing the proposed concrete or steel bridge across Dillingham St. W. C. Campbell is City Engr.

GULFPORT, MISS.—The Harrison County Supervisors have awarded contract to AUSTIN BROS., Atlanta, Ga., for the construction of a steel span or cable bridge over Red Creek at $3,000.

SHREVEPORT, LA.—Bids will be asked soon for the construction of new foot and wagon bridge across Red River at this point. All plans and arrangements for this purpose having been completed. C. G. Rives City Comptroller, Shreveport, is interested. Estimated cost, about $300,000. Noted on Jan. 20.

CINCINNATI, OHIO.—Bids will be received until March 11 by the County Commissioners, Fred. Dreihs, Clk., for constructing a bridge on Whiskey Run Road in Springfield Township.

CLEVELAND, OHIO.—Bids were received as follows on Feb. 3 for the W. 25th St. superstructure over the New York Chicago & St. Louis R. R.: VAN DORN IRON WORKS CO., of Cleveland, $38,721 (awarded contract); King Bridge Co., $39,534; American Bridge Co., 30 Church St., New York, $41,625; McClintic-Marshall Construction Co., $42,915; William Kupper Construction Co., $43,547.

The High Level Bridge Commission, in a preliminary report to the Mayor, recommended repairs to the Superior viaduct and to convert the Central viaduct into a high level bridge. Estimated cost, $55,000 and $400,000 respectively.

Bids were opened on Feb. 3 for constructing five superstructures. The following are the lowest bids received: King Bridge Co., Cleveland, on Adelbert Road, S. E., $4,028, and on Fairmont Road, S. E., $3,710; Van-Dorn Iron Works, Cleveland, on Quincy Ave., S. E., $14,027, and on E. 105th St., $7,833; the American Bridge Co., 30 Church St., New York, on Woodhill Road, S. E., $1,332.

XENIA, OHIO.—Bids will be received until March 3 by the Board of County Commissioners for constructing a steel bridge with concrete floor in the southwest corner of Jasper Township.

DERBY, IND.—Bids are asked by the County Commissioners, of Perry County, Cannelton, until 1 p. m., March 7, for the construction of a steel bridge acrpss Oil Creek near here.

CHAMPAIGN, ILL.—The PAN-AMERICAN BRIDGE CO., of New Castle, Ind., was awarded contract on Feb. 8 for constructing the new iron bridge at the Newcomb ford, at the Sangamon River on the Cond[illegible]-East Bend township lines, at $5,995. There were eight bidders, the highest being $7,6[illegible].

PEORIA, ILL.—Bids are asked until Feb. 26 by the Department of Public Works for the removal of certain portions of the concrete bridge acros sthe Illinois River at Bridge St.

*WILMETTE, ILL.—We are officially advised that bids were received by I. J. Bryan, Clk., Board of Trustees, Sanitary District of Chicago, on Feb. 16, for metal work for Sheridan Road bridge and Wilmette pumping station, Wilmette. The work consists of furnishing, fabrication and erection of metal work. The bids were as follows: (a) Furn-

ishing [illegible] ation and erection of entire structure; (b) extra structural steel per lb.; (c) extra steel castings per lb.; (d) extra iron ca[illegible]gs per lb.; (e) extra bronze and b[illegible] etc., per lb.: Milwaukee Bridge [illegible] Milwaukee, Wis., (a) $22,195; (b) 3.[illegible], (c) 8 cts., (d) 4 cts., (e) 50 cts.; T[illegible]ing Bridge Co., Cleveland, Ohio, (a) $[illegible] (b) 3.5 cts., (c) 8 cts., (d) 6 cts., [illegible] 55 cts.; The Toledo-Massillon Bridge [illegible] Toledo, Ohio., (a) $24,468, (b) 5 cts., [illegible] 6 cts., (d) 5.5 cts., (e) 50 cts.; Wisc[illegible] Bridge & Iron Co., Milwaukee, Wis., [illegible] $24,662, (b) 4 cts., (c) 10 cts., (d) 5 cts., [illegible] 30 cts.; Roembeld Construction Co., [illegible] La Salle St., Chicago, Ill., (a) $24,7[illegible] 6 cts., (c) 10 cts., (d) 5 cts., (e) [illegible] cts.; American Bridge Co., 30 Chur[illegible], New York, (a) $25,000, (b) 3.36 [illegible] (c) 9.4 cts., (d) 5.95 cts., (e) 43 cts.; [illegible]go Bridge & Iron Works, 105th and [illegible] Sts., Chicago, Ill., (a) $27,442, (b) [illegible], (c) 10 cts., (d) 4 cts., (e) 50 cts.

RO[illegible]ORD, ILL.—Bids are asked by S. B. Han[illegible]y Engr., until Feb. 25, for construct[illegible] cement concrete bridges at Seventh and [illegible]h Aves. and 15th St., all over Keith [illegible]reek; also a cement concrete retaining wall at east end of the Chestnut St. bridge.

SIOUX CITY, IOWA.—Contract for rebuilding the plate girder bridge over Perry Creek at 24th and Geneva Sts., has been awarded to LEWIS & LEEDER. G. Y. Skeels is City Engr.

HUTCHINSON, KAN.—Bids will be received until March 11 by the Board of Commissioners at the office of Edward Metz, City Clk., for constructing a reinforced concrete arch bridge 50-ft. span, over Cow Creek, a distance of 300 feet. C. L. McLane is City Engr.

LEAVENWORTH, KAN.—Bids are asked until noon, March 7, by J. W. Niehaus, County Clk., for constructing several bridges.

YANKTON, S. DAK.—The HENNEPIN BRIDGE CO., of Minneapolis, Minn., has been awarded contract for the construction of all the bridges to be erected in Yankton County during 1910. Bids were opened on Feb. 3.

SHOSHONE, WYO.—The DES MOINES BRIDGE & IRON WORKS, Des Moines, Iowa, has been awarded contract for building a 130-ft. steel bridge in this city for highway traffic.

ST. CHARLES, MO.—The CARMI CONSTRUCTION CO., of Carmi, Ill., has been awarded contract to strengthen the $2,000,000 Wabash R. R. bridge at St. Charles. The structure will be reinforced with concrete. Many of the present iron braces will act as a core to the heavy concrete pillars.

ROGERS, ARK.—The Arkansas, Oklahoma & Western R. R., W. R. Felker, Pres., Rogers, Ark., will construct one steel and 21 wooden bridges across the White River in connection with 35 miles of railroad, now under construction, from Rogers to Huntsville, Ark.

BIXBY, OKLA.—The Tulsa County Commissioners, Tulsa, have awarded contract to the CANTON BRIDGE CO., of Canton, Ohio, at $4,975 to construct a 125-ft. bridge across Snake Creek.

CASTLEROCK, WASH.—Bids are asked until April 5, by the Board of County Commissioners for the construction of a 300-ft. steel highway bridge at Castlerock. The structure will have one span with wood flooring on a 16-ft. roadway. The substructure will be of concrete, having two piers 70 ft. high, 55 ft. being above the water. G. S. Roberts, Kalama, Wash., is Engr.

PENDLETON, ORE.—The Atlas Bridge Co., of Portland, Ore., has been awarded contract at $8,000 for the erection of four new steel bridges. The bridges are to be located at McCoy, across the Walla Walla River, at Milton, across the Walla Walla River, Butter Creek, near its mouth, and across Dry Creek, at Blue Mountain Station.

NORTH BEND, ORE.—VICTOR ANDERSON, of North Bend, has received contract at $7,785, for the construction of a drawbridge on South slough. The bridge is to be completed by June 1.

CASTLE DALE, UTAH.—JAMES J. BURKE & CO., of Salt Lake City, Utah, have secured contract at $29,597, for the construction of five bridges in Emery County. The bridges will be of steel, with concrete abutments.

WINNIPEG, MAN.—Bids are asked until March 7, by the Board of Control, for the construction of an overhead bridge at Brown and Brant Sts.

WINNIPEG, MAN.—See item under Buildings.

BUILDINGS.

FORT McKINLEY (Portland post-office), ME.—Bids are asked by Capt. C. F. Humphrey, Jr., C. Q. M., 655 Congress St., Portland, until 10 a. m., March 15, for the construction, plumbing, heating, and electric lighting of the following buildings at Fort McKinley, Me.: Two double sets N. C. O. quarters, Plan 82-N (stucco); one quartermaster's storehouse, Plan 198 (brick); addition to guardhouse (brick).

ROXBURY (Boston post-office), MASS.—In the Lewis School District, Roxbury, there will be erected a building for elementary uses by the Boston Board of Education. The architects have followed the English collegiate style. The building will be erected on Hutchings St. It will be 2½ stories high and will have ten school rooms on two floors, with a large playroom in the basement. It will be of red brick with limestone trimmings and slated pitch roof. Eventually the school will be duplicated on the opposite side of a court, the two buildings to be connected by a 1-story assembly hall. The cost of the building will be about $65,000, and it will be ready for occupancy early next fall.

PAWTUCKET, R. I.—Bids were received as follows on Feb. 21 by James Knox Taylor, Superv. Arch. of the Treasury Department, Washington, D. C., for the construction of an extension to the post-office at Pawtucket, R. I.: N. B. Smith, New York, $48,943; Wheaton Building & Lumber Co., Putnam, Conn., $57,092; William H. Fissell & Co., 1133 Broadway, New York, $52,500; M. A. McConigle, Newport, R. I., $57,947; Conners Bros. Co., Lowell, Mass., $51,987; Conroy Bros., 217 West 125th st., New York, $46,977; Wilmarth & Mickellop, Pawtucket, $57,405; Horton & Heminway, Boston, $49,975; Mandiet Construction Co., New York, $44,935.

HARTFORD, CONN.—The Northwest School District has appointed a committee to secure plans for a building, to have a complete heating plant, to cost about $46,000. Dr. D. T. Sweet is Chn.

NEW HAVEN, CONN.—Professor Russell H. Chittenden, Director of the Sheffield Scientific School of Yale University, recently announced a $250,000 gift from George G. Mason, of New York, and William S. Mason, of Evanston, Ill. The money is for a laboratory of mechanical and engineering. Charles C. Haight, 452 Fifth Ave., New York, Arch.

ALBANY, N. Y.—The House of Good Shepherd, a reformatory institution for girls, is planning an additional structure to its present building at Central Ave. and Manning Boulevard. Plans and specifications are being prepared for the work.

NEW YORK, N. Y.—Plans have been filed with the Buildings Superintendent for a 12-story loft and store building to be erected from designs by Rouse & Goldstone, Archs., at the southwest corner of Hudson and Duane Sts. for the Central Building Co., Hyman Sonn, Pres. It is to have a frontage of 4[illegible] ft. and a depth of 120.10 ft. with an extension, and will cost $350,000.

The Manhattan Office Building Co. has bought from Charles Sooysmith, 114 East 16th St., a 4-story dwelling on plot 31.6 × 103.3 ft., and from John L. Golden, 116 East 16th St., a similar house, on lot 25 × 103.3 ft. On the combined lot a 12-story office and loft building will be erected, to cost about $260,000, from plans by Squires & Wynkoop, Archs., 44 Cortlandt St. The site is 100 ft. west of Irving Pl. and opposite the new Borgfeldt Building. Gerry C. Beach, Evkley H. Stearns, and H. M. Ingraham are members of the purchasing corporation.

The Brevoort Construction Co. has filed plans for a 16-story office and loft building with ground floor stores to be built at 2 to 6 West 45th St., from designs by Schwartz & Gross, Archs., 347 Fifth Ave. It is to be in the Renaissance style, of brick, finished with limestone and granite and trimmings of terra cotta. It will have a frontage of 75 ft. and a depth of 90 ft. and will cost $625,000.

NEW YORK, N. Y.—The Heywood Bros. & Wakefield Co. has filed plans for a 12-story furniture warehouse to be erected from designs by Lee & Hewitt, Archs., 1123 Broadway, at 514 to 520 West 34th St., and running through the block to 33d St., between Tenth and Eleventh Aves., one block north and west of the rear portion of the Pennsylvania R. R. terminal holdings. It is to have a frontage of 100 ft. and a depth of 197.5 ft., and will be occupied by the furniture company. The cost is estimated at $500,000.

Plans have been filed for a 12-story loft building of brick, limestone, and terra cotta, 75 ft. front, to be built from designs by Mulliken & Moeller, Archs., 103 Park Ave., for the Land & Realty Co., Raymond L. Owen, Pres., to replace the vacated building of the old Second Reformed Presbyterian Church, at 225 West 39th St., adjoining the Roman Catholic Orphan Asylum. It is to cost $300,000 and has been leased for a term of years to the American Press Association.

The plans for the parochial school and convent to be erected in connection with St. Ambrose's Church, Brooklyn, call for architecture and construction in harmony with the church erected under the supervision of the rector, the Rev. Thomas F. McGronen. The school building will be 60 ft. wide and 100 ft. deep, and it will contain 17 classrooms. There will be an auditorium with a stage for entertainments and lectures. In the basement will be playgrounds. The convent will be a 4-story building, and will house the Sisters of St. Joseph, who will teach in the school. Work on the buildings will be begun in April, and they will be completed in time for opening in the fall. The total cost will be over $100,000.

NEW YORK, N. Y.—Bids are asked by R. Waldo, Fire Comr., until 10.30 a. m., March 2, (1) for furnishing all the labor and materials required for repairs and changes to doors in the quarters of Engine Companies 2, 33, 40, 67 and Hook and Ladder Companies, 6, 21, 22 and 24, Boro. of Manhattan; (2) for repairs to the quarters of Engine Company 31, Boro. of Manhattan; (3) for repairs to the quarters of Hook and Ladder Company 23, Boro. of Manhattan; (4) repairs to the quarters of Engine Companies 41, 43, 62, 61 and 50, Boro. of the Bronx.

WARD'S ISLAND (New York post-office). N. Y.—Bids were received as follows by the State Lunacy Commission, Albany, N. Y., Feb. 16, for the construction of four cottages, including heating, plumbing and electric work, at the Manhattan State Hospital, Ward's Island, N. Y. F. B. Ware is State Arch., the Capitol, Albany: Oscawanna Building Co., 200 Fifth Ave., New York, $162,700; O'Connell & Hanna, 271 West 125th St., New York, $150,300; A. Pasquini, 1123 Broadway, New York, $174,000; Morris Kantrowitz, Albany, N. Y., $153,000; Thomas J. Buckley Construction Co., 103 Park Ave., New York, $161,500; Thomas McKeown, Inc., 103 Park Ave., New York, $173,300; F. T. Nesbit & Co., 116 Nassau St., New York, $185,000; Willis & Marvin Co., 1270 Broadway, $179,369; J. DiBenedetto, 423 East 115th St., New York, $164,700; Daniel J. Ryan, 723 Third Ave., Brooklyn, N. Y., $168,418; Charles H. Peckworth, 415 Hudson St., New York, $167,840; Luke A. Burke & Sons Company, 25 West 42nd St., New York, $148,000; Peter Keeler Building Co., Albany, N. Y., $172,333; J. F. Walsh Construction Co., 1 Madison Ave., New York, $212,940.

WEST POINT, N. Y.—The Military Academy appropriation bill, which carries a number of construction projects and appropriations therefor, together with money for the support of that institution, was reported to the House of Representatives on Feb. 10. The annual estimates submitted to Congress for this measure were $1,876,332. The bill as reported carries $1,855,249, a reduction from the estimates of $21,082. The amount of money provided for the permanent establishment carries $305,300. Col. H. L. Scott is Supt.; Maj. John M. Carson, Jr., Q. M., West Point.

BUFFALO, N. Y.—Andrew B. Brown, Arch. and builder, 425 Jersey St., will erect and lease to the Federal Government a building 40 × 170 ft., two stories, of white enameled brick and steel to be erected at West and Forest Aves. for use as a branch post-office. Estimated cost, $40,000.

Funds are being raised by the parishioners of St. John the Baptist Roman Catholic Church on East St. for the erection of a convent building at the corner of East and Grace Sts., for which the site has been secured. Rev. Michael Noonan, Rector, East St. and Hertel Ave., is taking preliminary steps for preparation of plans.

GARDEN CITY, (L. I.) N. Y.—See item under Manufacturing Plants.

PHILADELPHIA, PA.—The Board of Managers of the Mary J. Drexel Home has commissioned Carl P. Berger, Arch., South Penn Sq. Bldg., to plan the remodeling of the old House of Refuge for Girls at 22d and Poplar Sts., into a school for the use of the educational department conducted by the home. The old buildings which occupy the block on 22d St. from Poplar St. to Girard Ave., were purchased considerably more than a year ago by the management of the Drexel Home for the purpose of enlarging its school facilities.

Bids for the erection of two wings to the Henry Burk School, Second and Christian Sts., were opened by the Property Committee of the Board of Education, at City Hall, on Feb. 14. The wings will provide accommodations for more than 300 pupils. The figures of the proposals follows: Mitchell Bros., 2125 Race St., $46,500; B. Kitcham's Sons, 1029 Brown St., $48,950; Henry E. Baton, $51,987; Cramp & Co., Commonwealth Bldg., $51,065; John H. Jordan, 71st and Oxford Sts., $53,926; David Peoples, Betz Bldg., $45,673; P. J. Murley, 1216 Chancellor St., $47,400; M. McManus Construction Co., 224 North 32d St., $49,320.

It is planned to erect a building for the Church of the Holy Comforter, 48th St. and Haverford Ave. The preliminary designs of Clarence Brazer, Arch., 1133 Broadway, New York, have been accepted. The present church will be retained as a parish house, and the old Sunday-school building will be torn down. The new church will be constructed in the perpendicular Gothic style. The nave of the church will contain seven bays and will seat about 500 people.

PHILADELPHIA, PA.—A building for the Architectural School is to be erected at the University of Pennsylvania. It will cost $250,000. Dr. Paul Philippe Cret, Professor of Design at the University, has prepared the plans.

GREENSBURG, PA.—Announcement has been made that the proposed passenger station of the Pennsylvania R. R. Co. at Greensburg will be a 2-story structure of brick and terra-cotta and will cost $70,000.

HAVERFORD, PA.—Bailey & Bassett, Archs., 421 Chestnut St., Philadelphia, have been commissioned to prepare plans for a science building at Haverford College. The building will be of stone. three stories high with a frontage of 53 ft. and a depth of 100 ft. The estimated cost is $50,000.

WASHINGTON, D. C.—A bill has been introduced in the Senate appropriating $15,000,000 for erection of a building or buildings, in this city to accommodate the State Department, the Department of Commerce and Labor, and the Department of Justice. The ground for this proposed improvement the Government has obtained title to. The bill puts the general supervision of the buildings to be erected in the hands of the heads of the three departments named and requires them to erect "a suitable and commodious fireproof building or buildings, whichever, in their opinion, may best meet the requirements of their respective departments." It is believed that three separate structures will be erected, as such a plan would better fit in with the general scheme of beautifying the city than one great building for the three departments. One section of the bill provides that, within the buildings to be erected, accommodations shall be provided for all the bureaus and offices of the department or departments within the District of Columbia. The construction is to be under the immediate supervision of an officer of the Government.

WASHINGTON, D. C.—Bids were received as follows on Feb. 17, by the Commissioners of the District of Columbia, for the construction of the John Eaton School Building, No. 160, at the northeast corner of 34th and Lowell Sts.: George E. Wyne, Munsey, Bldg., $58,700; W. E. Mooney, Lenman Bldg., $65,775; Thomas H. Melton, 621 F St., N. W., $63,348; Burgess & Parsons, 612 13th St., N. W., $61,000; William H. McCray, Bond Bldg., $62,000; all bidders of Washington, D. C.

HENDERSON, N. C.—Bids were received as follows on Feb. 18, by James Knox Taylor, Arch., of the Treasury Dept., Washington, D. C., for the construction of a post-office building at Henderson: R. H. Richardson & Son, Hampton, Va., $58,434; C. L. Saunders, Clifton Forge, Va., $55,700; W. H. Fissell & Co., 1133 Broadway, New York, $63,300; D. J. Phipps, Newport News, Va., $56,403; Newport Constructing & Engineering Co., Newport News, Va., $59,845; King Lumber Co., Charlottesville, Va., $59,900; Ambrose B. Stannard, St. James Bldg., New York, $54,450; Richardson & Burgess, Inc., Washington, $56,420; M. P. Wells, Witherspoon Bldg., Philadelphia, $61,849; Westchester Engineering Co., 39 East 42d St., New York, $62,895; Edward I. Frost, Asheville, N. C., $59,961; Harrison Bros., Williamsport, Pa., $71,000; McHenry-Beatty Co., East Liverpool, Ohio, $58,189; McGregory & Williamson, Norfolk, Va., $78,538; J. E. & A. L. Pennock, Land Title Bldg., Philadelphia, $62,700; James J. Doak & Co., 1240 Chestnut St., Philadelphia, $65,430.

FORT DADE (Egmont post-office), GA.—Bids are asked by the Constructing Q. M., until 10 a. m., March 12, for constructing a double company storehouse at this post.

MEMPHIS, TENN.—Representatives of the Mississippi Valley Transportation Co. have been arranging for freight and terminal facilities on which it is estimated that the company will spend approximately $500,000. It is stated that it will be necessary to spend this amount in order to get terminal facilities at Memphis similar to those at New Orleans and St. Louis. Officials of the company state that the first boat will be sent from St. Louis to New Orleans in August or September, and they are making arrangements to have their terminals completed before the service is begun.

LOUISVILLEE, KY.—An apartment house to cost approximately $85,000 will be erected within the next six months, according to announcements made recently by a representative of the Owens Realty Co. The structure will stand on a site which is vacant at present at the northwest corner of Sixth and Hill Sts. The apartment planned by the Owens Realty Co. will cost about $60,000. It will be a 3-story building with 18 apartments. A building permit will be taken out for the building and work will begin on the structure at once. It is to be finished and ready for occupancy at the end of five months. L. KELLER & SON, contractors and architects, designed the building and are now making estimates on the probable cost of construction.

CINCINNATI, OHIO.—We are officially advised that the Board of Education has approved plans for a Winton Place School. Charles W. Handman, Business Mgr., is preparing specifications for the work, and expects to be able to advertise for bids in about three weeks. The structure will be on the site of the present building, facing Hand Ave. The present building, consisting of six rooms, will be remodeled so as to form the left wing. The building will be two stories high and will contain 16 regular class rooms, besides manual training and domestic science rooms, a gymnasium and an auditorium. It will be heated by a steam plant. The front will be constructed of pressed brick and terra cotta. The estimated cost of the building is $100,000, and of equipping it with a heating and lighting system, $17,500. Samuel Hannaford & Sons are Archs., Hulbert Block.

CINCINNATI, OHIO.—See item under Manufacturing Plants.

AKRON, OHIO.—Bids are asked by George B. Post & Sons, Scofield Bldg., Cleveland, Ohio,, until Feb. 25 (not Feb. 27, as stated last week), for constructing a 7-story store, office and bank building with a ground plan of 170,000 sq. ft. The building will cost $300,000, and the equipment $50,000. The contract for steel work has been let to the RIVERSIDE BRIDGE CO., Martins Ferry, Ohio. The structure will be built by the Second National Bank.

COLUMBUS, OHIO.—J. R. Hughes is planning to erect a 3-story business block at the corner of First Ave. and High St., from plans drawn by Richards, McCatry & Bulford, Archs., The Ruggery, Columbus.

KNOX & PHILLIPS, of Columbus, Ohio, have been awarded the contract for construction of the First Methodist Church at Twelfth Ave. and Indianola Ave. The cost exceeds $50,000.

OTTAWA, OHIO.—Frank L. Packard, Arch., Hayden Bldg., Columbus, Ohio, has been commissioned to prepare plans and specifications for a $200,000 court-house to be erected at Ottawa, Ohio.

DELAWARE, OHIO.—Marriott & Allen, Archs., Hayden Bldg., Columbus, Ohio, have been commissioned to prepare plans for a fireproof high school building to be erected at Delaware. The building will be three stories high and contain twelve class rooms, gymnasium, manual training department, etc.

MARION, IND.—The Pennsylvania R. R. Co. has ordered plans on which bids will be asked for the construction of a railway station on Tenth and Washington Sts.

LA FAYETTE, IND.—A site has been selected and plans ordered for the erection of a tuberculosis sanitorium near this city. Severage Burrage is Pres.

GOSHEN, IND.—The Chicago, South Bend & Northern Traction Co. has secured a site on which to erect a passenger and freight station. Bids will be received at the South Bend office.

INDIANAPOLIS, IND.—Charles Mayer & Co. have approved plans for the construction of a 7-story business building at 29 West Washington St. Bids will be asked about March 1.

Volney T. Malott has announced that bids will be received for the remodeling and enlarging of the Majestic Theater building and constructing a new stage as soon as the plans can be completed.

Herbert L. Bass & Co., Archs., Indiana Pythian Bldg., will draw the plans and receive bids for the erection of a row of buildings on Capital Ave., between Vermont and North Sts., to be used for automobile salesrooms.

Bids are asked by the directors of the Young Men's Institute, William M. Fogarty, Chn., until March 15, for the construction of an association building at the corner of Virginia Ave. and McCarty St.

BRAZIL, IND.—The Commissioners of Clay County will receive bids for the erection of a poor asylum as soon as plans are approved.

INDIANAPOLIS, IND.—At the meeting of the directors of the Indianapolis Union Railway Co. held in the union station on Feb. 15, A. A. Zion, Supt., submitted a number of recommendations for increasing the capacity of the station, which were accepted by the directors. The work was ordered done, and the improvements, which will cost about $75,000, will be made as soon as possible. While the size of the building will not be increased, the interior will be rearranged in such a manner that its capacity will be doubled. The restaurant and dining room now occupying the southeast corner of the building will be moved to the northeast corner, and the room now occupied by the restaurant will be thrown into and made a part of the general waiting room. This plan will also be followed with the women's private room, now in the southwest corner of the building. The main waiting room and rest room for the women will be placed in the basement, where also there will be a room for the exclusive use of immigrants. An elevator will be put in, and the room now occupied by the ticket office will be enlarged. The barber shop and bathroom will be moved to the basement. A canopy in keeping with the architecture of the building will be extended the entire length of the building on the north side and reaching out into Jackson Pl. about 30 ft. It will also extend far enough to the west to cover the car tracks.

AUBURN, IND.—Bids are asked by the Commissioners of DeKalb County until March 1 for the construction of a courthouse.

GARY, IND.—The Directors of the Y. M. C. A., C. W. Hawthorne, Chn., are preparing to ask for bids for the erection of a Y. M. C. A. building.

DETROIT, MICH.—Harrigan & Reid, steam fitters, 70-72 State St., Detroit, have purchased a site 30 × 100 ft. at the corner of Park and State Sts. and will build a 6-story building at an estimated cost of $100,000.

CHICAGO, ILL.—Hotel Moir, to be 30 stories high will be erected on the site of the present Morrison Hotel, at Madison and Clark Sts., according to the Chicago "Record-Herald." The structure is to be built by Harry C. Moir. Cost, $5,000,000. Marshall & Fox, First National Bank Bldg., are Archs.

MILWAUKEE, WIS.—Plans for the proposed $65,000 annex have been submitted at the annual meeting of the Board of Directors of the Milwaukee Hospital. The addition will contain 36 private rooms. The fourth floor is to be devoted to surgical work, and there will be large operating rooms, a laboratory and X-ray and sterilizing rooms. Judge James G. Jenkins has been elected Pres. of the Board; George D. Van Dyke, Vice-Pres.; Gustav A. Reuss, Secy., and the Rev. H. L. Fritschel, Treas.

SIOUX CITY, IOWA.—Within a month construction will start on the proposed 4-story building of the International Harvester Co. of America, which is to be erected at the northeast corner of Fifth and Wall Sts. The structure is to be 130 × 150 ft. and will have a capacity of 350 cars. The office and show room will be on the second floor, 10,000 sq. ft. of space being allotted for this purpose. Practically all the remainder of the floor space is for warehousing except that taken for elevators and desk room. The buildings now on the site are being removed.

LINCOLN, NEB.—The contract has been let for the construction of the proposed Y. M. C. A. building to GERSTENBERGER & GOODEN, at $95,000.

FARGO, N. DAK.—Bids are asked by W. A. Yoder, Secy. of the North Dakota Agricultural College, Fargo, N. Dak., until 2 p. m., Feb. 25, for the completion of the Women's Building for said institution. Hancock Bros., Douglass Bldg., Fargo, are Archs.

ST. LOUIS, MO.—At a recent meeting of stockholders of the Missouri Glass Co., St. Louis, A. H. Bryant was elected Pres., and plans were ratified for the erection of a 7-story reinforced concrete fireproof building at 18th and Locust Sts., St. Louis. E. M. Bowman was elected Vice-Pres., and S. A. Gore was elected Secy. and Treas. The old board of directors was re-elected. Work on the building will be started at once, and it will be completed and occupied in the early fall.

CANYON CITY, TEX.—The Board of Education has awarded contract for building the West Texas Normal school at Canyon City to MARTIN, HOLDERNESS & OAST, of Stamford, Tex., at $89,000.

LAWTON, OKLA.—Bids are asked by the Secretary of the Interior, Washington, D. C., until 2 p. m., March 7, for the construction of a 10-room school building for the north addition to the city of Lawton, Okla.

SEATTLE, WASH.—At a recent meeting the School Board let a contract for the construction of a 9-room school building at York St. to J. F. FLYNN, on a bid of $41,900, and for a building of similar size at West Greenwood to LANCE & PETERS, at $44,000.

EVERETT, WASH.—A concrete, steel and pressed brick office building, 48 × 180 ft., will be erected on the northeast corner of Rockefeller and Hewitt Sts. Actual building to begin the first of March. Cost, $100,000. The Bank of Commerce will occupy the ground floor. Those interested in the enterprise are George A. Dailey, L. H. Echkhoff and S. C. Baldwin.

MEDFORD, ORE.—Medford Lodge No. 103, A. F. & A. M., has decided to purchase the Prall lot on East Main St. and improve it with a 3-story building at a cost of $50,000. The building will be steam heated, full basement. Work is to be started in the spring.

SALEM, ORE.—The stockholders of the Willamette Hotel Co. have decided to proceed, at the expiration of the lease of the present tenent in March, to remodel the Willamette Hotel, at an expenditure of $60,000. The directors were authorized to enter into a contract with Louis R. Hazeltine for complete plans and specifications.

SAN FRANCISCO, CAL.—Gertrude S. B. Saunders will build a 5-story steel frame structure at the southwest corner of California and Battery Sts., to cost $139,000, for stores and offices.

H. M. Heineman will construct an 8-story steel loft and store building in the north line of Bush St., 137 ft. east of Sansome St., to cost $40,000.

Plans have been prepared by Bliss & Faville, Archs., 15 Second St., for a 5-story and basement Class C building to be erected on the north line of McAllister St. between Hyde and Leavenworth Sts. The ground space is arranged for two stores and also will be improved, for the present, by a great main entrance 50 × 60 ft. The ground to be occupied is 82.6 × 137.6 ft. Above the stores there will be 16 apartments. The front of the building will be of pressed brick, trimmed with terra cotta. The entire covering of the steel frame will be of brick. The estimated cost is $110,000.

SANTA CRUZ, CAL.—A banking structure will be erected at once of the People's Bank, on Pacific Ave., at a cost of $60,000. The plans have been prepared by W. H. Weeks, Arch., Grant Bldg., San Francisco. The building will be of Class A construction. It will be two stories high. The exterior will be of terra cotta. The banking room will be finished in hard woods. The contract has been awarded to W. W. ANDERSON, at $44,900.

MARTINEZ, CAL.—A hospital is to be built by Contra Costa County, the plans of W. H. Weeks, Grant Bldg., San Francisco, having been accepted in competition for the building. Bids have been called for the new structure, and in a short time work will begin on construction. The hospital has a frontage of 118 ft. and a depth of 68 ft., and is to be two stories high above the basement. The two upper floors are to be divided into wards and rooms, having accommodations for 36 patients. A number of private wards will be provided for pay patients. Each floor will be provided with diet kitchens, baths, lockers and toilet rooms. The building is to be of brick, with stone trimmings and a fireproof roof.

LOS ANGELES, CAL.—The contract has been awarded to CARL LEONARDT, H. W. Hellman Bldg., by Morgan & Walls, Archs., 232 North Main St., for construction work on a 6-story steel and concrete office building to be erected on West Fourth St., for I. W. Hellman, Pres. of the Nevada National Bank, of San Francisco, Cal., for all work except steel work, terra-cotta, plumbing and heating, electrical and iron work, carpenter and joiner work, at $60,735. The contract for iron and steel work, the LLEYELLYN IRON WORK, North Main and Redondo Sts., $27,410. Contract for carpenter and joiner work to SOUTHERN CALIFORNIA HARDWOOD & MFG. CO., Los Angeles, $29,000. Contract for terra-cotta work to GLODDING McBEAN & CO., of San Francisco, $10,200. Marble and tile, to B. V. COLLINS, Los Angeles, $5,465. Ornamental iron work, to PACIFIC ORNAMENTAL IRON WORKS, Los Angeles, $11,275. Passenger elevators to OTIS ELEVATOR CO., Los Angeles, $9,000.

LOS ANGELES, CAL.—An 8-story fireproof building, to cost about $400,000, will be erected at the corner of Hill and Ninth St. by the Consolidated Realty Co., Judge D. K. Trask, Pres. It will be either a hotel or an apartment building.

LOS ANGELES, CAL.—An office building four to six stories high will be erected on Hill St., south of Sixth St., by the Central Broadway Building Co., American Savings Bank Bldg. The building will be constructed of steel and concrete and will cost from $100,000 to $125,000.

OAKLAND, CAL.—Plans for an 8-room residence for W. I Smith are being prepared by the firm of Leonard & Russell, Archs., to be located in the east side of Fifth Ave, 200 ft. north of Lake St., Oakland. The exterior is designed in the early English style of architecture and will be constructed of brick and plaster. The interior will have hardwood floors, brick mantels, furnace and all modern conveniences. The structure will be built by day work.

J. C. McMullen, Pres. of the State Savings Bank of Oakland, will start work immediately on an apartment house, to be built on the south side of East 19th St., between Eighth and Ninth Aves., Oakland. The building will contain 18 apartments of two and three rooms each. The rear end of the structure is to be one story below the street level, due to slope in the lot. In this portion, Mr. McMullen intends to establish a dining room, lounging room and kitchen. Each apartment is planned with a bathroom and a cabinet kitchen. The entire building will be heated by steam. The exterior of the building is treated in the straight line Gothic. Sidney B. Newsom, Humboldt Bank Bldg., San Francisco is Arch.

SYDNEY, N. S.—The contract for the proposed St. Andrew's Presbyterian Church has been awarded to RHODES, CURRY & CO., of Amherst, N. S., at $42,000. This figure is exclusive of the seating and other fittings. The church will be of either pressed brick or Scotch fire brick, with stone trimmings, and will seat 1,200 people. Total cost when completed, will be in excess of $50,000. Curry & Sparling, 9 Yonge St., Toronto, are Archs.

MONTREAL, QUE.—The Savoy Hotel will construct an addition to its present property on Victoria St., near St. Catharine St. About $200,000 will be spent, including inside improvements.

TORONTO, ONT.—It is stated that the Grand Trunk, Canadian Pacific and Canadian Northern railway companies will unite in sharing the cost of a union terminal station, to be located at the corner of King and Simcoe Sts., and running west.

HAILEYBURY, ONT.—Eugene Payette, Arch., 15 St. James St., Montreal, Que., has awarded the general contract for the erection of a Roman Catholic cathedral at Haileybury, Ont., to V. LADOUCOEUR, Ottawa, Ont., for the sum of $90,000.

OTTAWA, ONT.—The proposed Y. M. C. A. building will be erected in the summer on Metcalfe St., costing $60,000. H. W. Wilson is Secy.-Treas.

WINNIPEG, MAN.—The DOMINION BRIDGE CO., of Montreal, Que., has been awarded the contract for the steel work on a $1,250,000 building to be erected here this year; also the N. T. R. bridge across the Red River at Winnipeg.

REGINA, SASK.—The Canadian Pacific Ry. will erect a union depot for the use of the four railways centering here, it is reported. The station will be 480 ft. long, and part will be four stories high. It will cost in the neighborhood of $500,000.

CALGARY, ALTA.—A block with a frontage of 50 ft. will soon be erected by R. C. Thomas. Bids will be called soon.

EDMONTON, ALTA.—Bids are being called for a public school building on 17th St., Edmonton. George Turner is interested.

ARROWHEAD, B. C.—It is stated that the Canadian Pacific Ry. Co. will erect a hotel here at the north end of Arrow Lake. The structure will be similar in some respects to the Chalet at Lake Louise. It will cost $100,000. Hayber Reed is Mgr., Hotel System, C. P. R., Montreal, Que.

WATER-SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

*NEW YORK, N. Y.—Bids were opened by the Board of Water Supply on Feb. 15 for Contract 41, for furnishing and stalling 20 5 × 15-ft. sluice gates, 20 operating mechanisms, eight 66-in. stop-disc frames, four 66-in. stop-discs and three sets of drive-shafting for various structures along the line of the Catskill Aqueduct, at Mt. Vernon and Brown's Station. The lowest bid was that of the Ogden Iron & Steel Co., 147 Cedar St., New York, at about $90,670.

NEW YORK, N. Y.—Bids are asked by the Board of Water Supply until 11 a. m., March 8, for Contract No. 42, for furnishing and delivering eight 3-ft. by 8-ft. twin sluice gates, eight 20-in. hand operated gate valves, ten 60-in. gate valves, with operating mechanisms; four 60-in. gate valves, with individual electrical drive; four 60-in. gate valves, with gang drive; two 60-in. hydraulically operated gate valves and appurtenances, and three lines of floor drive shafting, for structures at Ashokan Reservoir, near Browns Station, Ulster County, and at Croton Lake Siphon, Westchester County.

DUNDEE, N. Y.—Plans have been prepared for a new pumping station and water tank to be built one mile south of this village at Big Stream on the New York Central R. R. This station will be used as a relief station to the one at this village as for some time past the well at this place has not provided sufficient water for the trains.

ELMER, N. J.—A company has been incorporated here by J. M. Hitchner, J. M. Garrison and others to construct waterworks, and will apply to the Borough Council for franchise.

TAKOMA PARK (Washington post-office), D. C.—The PITTSBURG FILTER MFG. CO., Farmers Bank Bldg., Pittsburg, Pa., has secured contract for constructing the proposed filter plant, with a capacity of 300,000 gallons, at $7,110. Other bids received for plant complete were: American Water Softener Co., 1011 Chestnut St., Philadelphia, Pa., $8,805; John W. Danforth Co., 70-72 Ellicott St., Buffalo, N. Y. (two bids, $9,810 and $9,436.

WHEELING, W. VA.—Contracts were awarded by the Board of Control on Feb. 14 for the construction of the new pump house at the city water-works as follows: Substructure, to L. G. HALLOCK & SON, Wheeling, at $48,865; superstructure, to PERKINS & JACKSON, Wheeling, at $29,116.

BREVARD, N. C.—The city has issued $15,000 of bonds for water-works and sewerage. W. E. Breese, Jr., is Mayor.

JONESBORO, N. C.—The city has voted $20,000 of bonds for the construction of water-works.

LIVE OAK, FLA.—The city has awarded contract to O. E. HUGHES & CO., of Live Oak for drilling well for increasing water supply.

BOAZ, ALA.—The city contemplates spending $25,000 for the construction of waterworks. Capacity, 60,000 to 75,000 gallons, steel stand-pipe; 30 × 80-ft. building. W. H. Bartlett is Mayor.

VICKSBURG, MISS.—Bids will be received by the Mayor and Board of Aldermen until March 7 for laying water-mains in Cherry, Harris, Drummond and Walnut Sts., in all about 50 blocks.

LYON, MISS.—The city will issue $5,000 of water-works bonds.

ALEXANDRIA, LA.—The city has awarded contract to the CLIFFORD WELL CO., Texarkana, Ark., for drilling artesian well to increase the water supply, pumping capacity of 300,000 gallons by use of centrifugal or duplex pump. Cost, $3,252 for drilling to depth of 600 ft., $4,878 to depth of 900 ft., and $5,675 to depth of 1,000 ft.

DE RIDDER, LA.—De Ridder Water-Works Co. has been incorporated with $10,000 capital stock. Fred Johnson is Pres.; C. C. Davis, Vice-Pres.; J. F. Love, Secy.; W. R. Jones, Treas.

HUNTINGTON, TENN.—The city has voted $10,000 of bonds to extend the water mains to East End.

NORWOOD OHIO.—The City Council has passed the ordinance providing for an issue of $15,500 of bonds for water-works improvements, including two new wells and additional piping.

DETROIT, MICH.—The Wa[ter] Board on Feb. 8 opened bids for supplie[s]; the lowest bids follow: For 4,339 tons of [c.-i.] pipe, the American Car & Foundry Co[., De]troit, at $26.25 per ton for the 6, 8, 1[2 an]d 16-in., $25.75 for the 42-in.; for 7[6 val]ves, the Roe-Stephens Mfg. Co., Detroi[t,] $112.25. J. J. Haarer is Comr. Pub. Wks.

QUINCY, ILL.—The PLATT [IRO]N WKS CO., of Dayton, Ohio, has se[cured] the contract for a 6,000,000-gallon h[orizont]al crank and fly-wheel condensing engi[ne, at] $17,980.

MINNEAPOLIS, MINN.—The [Wat]er Committee of Council on Feb. 8 re[jected] all bids received for new boilers for [the] Northeast pumping station.

Bids will be received until F[eb. ..], by the city for furnishing the Wate[r-wo]rks Department with 2,000 ⅝-in. corp[oratio]n cocks, complete with couplings.

ASHLAND, KAN.—We are [officia]lly advised that contracts have been [aw]arded as follows, bids opened on Feb. 10, [for] the construction of municipal water an[d ligh]t plant: General contract to SQUIRE E[LEC]TRICAL CONSTRUCTION CO., 614 Wya[ndott]e Bldg., Kansas City, Mo.; hydrants a[nd v]alve, to WESTERN VALVE VO.; engin[e, to] FAIRBANKS-MORSE & CO.; tank a[nd t]ower to CHICAGO BRIDGE AND IRO[N] WORKS, 105th and Throop Sts., Chicago[; e]lectrical machinery, to WESTINGHOUSE [M]FG. CO. The J. S. Worley Co., Kansas C[ity], Mo., are Engrs.

NORTH PLATTE, NEB.—The S[ecre]tary of the Interior, Washington, D. C., [has] awarded contract to the ST. PAUL FOU[ND]RY CO., of St. Paul, Minn., for furnishin[g c.]-i. tunnel linings for use at the Path[fin]der dam, north Platte irrigation project.

FORT MACKENZIE, WYO.—We are officially advised that WILLIAM C[A]NARD, of Sheridan, Wyo., submitted the lowest bid on Feb. 14, to the Construction Q. M., U. S. A., for lining with waterproofing felt and vitrified brick a 1,000,000-gallon concrete reservoir near this post at $8,098. H. A. Hegeman is Construction Q. M., U. S. A.

WAXAHACHIE, TEX.—The city proposes to spend about $17,000 for water-works improvements. P. F. Davenport, of Waxahachie is Engr.

MIDLAND, TEX.—Bids will be received until March 7 for the construction of waterworks from plans of the O'Neil Engineering Co., of Dallas. Estimated cost, about $50,000.

MARBLE FALLS, TEX.—Bids are asked by J. C. Dumont for two 6,000,000-gallon pumps, centrifugal compound, to elevate water 300 ft., direct connected to motor or belt driven, and a 1,000,000-gallon gravity filter and for 5,000,000 additional capacity.

LAMAR, COLO.—Bids will be received until Feb. 26 for the purchase of $3,000,000 of bonds for the construction of an irrigation system in the Bent and Prowers irrigation district. Bids for construction will be called for later.

SEATTLE, WASH.—R. H. Thomson, City Engr., has estimated the cost of laying water mains in Trenton St., at $9,100.

MONROE, WASH.—Bids will be received about April 1 for the construction of a reservoir. S. A. Buck is Mgr. Monroe Water Co.

HOOD RIVER, ORE.—Specifications are now being prepared for the construction of the proposed water-works. Estimated cost, about $85,000. P. M. Morse is City Engr.

REDONDO BEACH, CAL.—Contract for the construction of the pumping plant has been awarded to the UNITED IRON WORKS, Los Angeles.

PASADENA, CAL.—Pasadena Park Tract Land & Water Co. will install a water system, with power plant and pumps. M. T. Weeks, E. S. Crump and H. B. Boyle are interested.

SAN FRANCISCO, CAL.—Contract for the construction of the pumping station of the new fire protection system was let on Feb. 11 by the Board of Public Works, to the HEALY-TIBBITTS CONSTRUCTION CO., San Francisco. The station is to be located at Second and Townsend Sts. Marsden Manson is City Engr.

TOMBSTONE, ARIZ.—The DES MOINES BRIDGE & IRON WORKS, Clinton, Iowa, has been awarded contract at $3,495 for the construction of the water tanks at the territorial prison.

CALGARY, ALTA.—Bids will be received by the City Commissioners until Feb. 25 for supplying c. i. pipe, valves, hydrants, specials, etc., for the proposed water-works extension for the year 1910. E. H. Gillis is City Clk.

THEODORE, UTAH.—Contracts will probably be let about June 1 for the proposed canal at Theodore for the Upper Blue Ranch, Canal & Reservoir Co. Estimated cost, about $160,000. Jackman Herrick is Secy., Theodore.

SALT LAKE CITY, UTAH.—We are officially advised that P. J. MORAN, of Salt Lake City, has been awarded contract by the City Council for the construction of the City Creek aqueduct at $25,192. Bids were opened on Feb. 4. List of bidders noted last week.

VANCOUVER, B. C.—Contract for supplying steel water pipe for ensuing year has been awarded to EVANS, COLEMAN & EVANS, Vancouver, at $9,600; and for c.-i. pipe, to ROBERTSON-GODSON Co., Vancouver.

SEWERAGE.

(denotes that this work is advertised in Engineering News.)*

SYRACUSE, N. Y.—JOHN W. DAVIN has been awarded contract, at $10,30[.], for the construction of a 20-in. sewer in Roby, Elsner, Dwight and other streets in the Fourth Ward.

MEDINA, N. Y.—We are officially advised that bids were received by the Board of Sewer Commissioners on Feb. 15 for furnishing all materials and labor and constructing an addition to the sewer system of

the villag... for the western portion, as follows: Fr... A. Gott, Hamburg, N. Y., $27,-750; Moor... Smith, Buffalo, N. Y., $27,790; Martin S...on, Medina, $28,000; James R. Steele, ... Owego, N. Y., $28,500; Julius Friedrich... ochester, N. Y., $31,998; Gray & Miller, ...ll, N. Y. $32,514; H. C. Schrader, Roc...r, $33,000; J. W. Dwyer & Son, Rochest...33,875; John C. Schrade, Williamspo..., $34,517; Engineer's estimate, $32,700 ...rles A. Ingersoll is City Engr.

WASH...TON, N. J.—We are officially advised ... bids were received on Feb. 14, at the ... of A. J. Craft, Boro. Clk., for constru... about eight miles of vitrified pipe se...om 8 to 18 ins., with Y branches, flush ... etc., and a sewage disposal works, ...ding the necessary piping, grading, et... e bids were: Union Building & Constru... Co., Passaic, N. J., $50,230; Salmon ...hers, Stanhope, N. J., $51,188; Clarke ...o., Morristown, N. J., $52,300; Filbert ...ng & Construction Co., $54,901; Bond & ...ally, Weehawken, N. J., $55,843; C. S. ...mbie, Pittsburg, Pa., $56,793; D'Ama... Stiffonelli, Newark, N. J., $57,-198; E. ... Mullin Co., Bayonne, N. J., $57,-940; Jo...-Hooker Co., New York, $57,964; M. P. M...rath, Easton, Pa., $58,265; Merrill & Ruck...r Co., 50 Church St., New York, $58,266; ... W. Heller, Newark, N. J., $58,-782; Fr... Puglia, Paterson, N. J., $59,923; J. M. M...abb, Bound Brook, N. J., $60,405; J. B. O'...urke Co., 83 Journal Bldg., Boston, Mass., ...549; E. S. Sawyer, Washington, $60,584; Harrison Construction Co., $60,674; Louis J...ques, Elizabeth, N. J., $60,886; S. W. Chi..., Bethlehem, Pa., $61,592; United Paving Co., Atlantic City, N. J., $61,598; Fernow & Brown, New York, $64,639; Ippolitto, Newark, N. J., $65,650. Clyde Potts is Engr., 30 Church St., New York.

ERIE, PA.—DENNIS O'BRIEN has been awarded contract for the reconstruction of the sewer extending 550 ft. west in Fourth St., from the Millcreek intercepting main sewer, at $1.20 a ft. for laying 15-in. pipe, 35 cts. for 6-in. pipe, $1.40 for Y or T branches, and $40 for manholes.

NORTH BRADDOCK, PA.—Bids are asked until 3 p. m., Feb. 25, by C. A. Stewart, Boro. Engr., for the construction of a terra cotta pipe sewer in East St., comprising about 828 ft. of 30-in. D. S. pipe, 520 ft. of 24-in., 100 ft. of 12-in., and 1,200 ft. of 6-in., and ten manholes.

*BALTIMORE, MD.—We are officially advised that bids were received on Feb. 9 by the Board of Awards for various sewer contracts, which have been acted upon as follows: Contract 46, power-house, pump house and land conduits at Back River disposal plant, awarded to RYAN & REILLY, 411 American Building, Baltimore, at $76,146; Contract 47 underwater conduits at Back River disposal plant, low bid informal, and all bids rejected; Contract 48, lateral sewers in sanitary district 19-B to IRWIN BROS., Greenville Ohio, at $69,765; Contract 49, lateral sewers in sanitary district 35, to IRWIN BROS., Greenville, at $19,668; storm-water contract No. 9, all bids rejected. New bids for Contracts Nos. 9 and 47 will be received until 11 a. m. March 2.

NORFOLK, VA.—F. J. McGuire of Norfolk submitted the lowest bid on Feb. 12 at $12,570 for the construction of sewers, manholes, flush tanks and outlets in Sixth Ward. W. T. Brooke is City Engr.

SANFORD, N. C.—The city has voted $25,-000 of bonds for the construction of sewer system. Surveys will be made by J. C. White, Durham, N. C., Engr.-in-Charge.

CLINTON, S. C.—The city has engaged J. B. McCrary & Co., Atlanta, Ga., to prepare plans for the construction of a sewer system.

CHARLESTON, S. C.—Bids were received as follows on Feb. 19, at the Bureau of Yards and Docks, Navy Department, Washington, D. C., for the construction of intercepting drain No. 2, at the Charleston Navy Yard: James Ferry & Sons, Crofton, Pa., (1) $29,850; (2) $29,700. P. D. Hay, Charleston, (1) $29,466; (2) $29,266; (3) $28,417. Simons, Mayrant Co., Charleston, (1) $31,606; (2) $31,406; (3) $28,877; deduct $200.

ATLANTA, GA.—The Sewer Committee has awarded the following contracts for sewer work for 1910: GEORGIA GRANITE CO., for construction of sewers, exclusive of work to be done under proposed bond issue; WITHERS FOUNDRY & MACHINE WORKS, for castings, catch-basins, manhole coverings, etc.; SCIPLE SONS, for vitrified pipe for sewers and for cement. All contractors of Atlanta.

MADISON, FLA.—Bids will be received until March 16 by R. H. Rowe, Mayor, and Board of Councilmen for furnishing material and constructing a system of sanitary sewers, approximately six miles of 6 to 15 in. pipe sewer and a disposal plant. H. S. Jaudon is Engr., Box 582, Savannah, Ga.

LEXINGTON, KY.—The city has awarded contract to THOMAS O'DAY of Lexington for constructing East Main St. sewer, 1,600 ft. long.

CLEVELAND, OHIO.—Bids are asked by Ira O. Hoffman, Secy. of the Director of Public Service until noon, March 3, for the construction of sewers in various streets, avenues, roads and courts. A. B. Lea is Dir. Pub. Ser.

MICHIGAN CITY, IND.—H. M. Miles, City Engr., has completed plans for a concrete sewer in Willard Ave. Estimated cost, $40,-000.

RICHMOND, IND.—Bids will be received until March 10 by H. M. Hammond, Chn. Bd. Pub. Wks., for constructing various sewers.

DETROIT, MICH.—Contract for furnishing and erecting machinery for a sewage pumping station at Park View Ave., to include two centrifugal pumps, capacity 100 cu. ft. per second; one centrifugal pump, capacity 30 cu. ft. per second; engines, motors, boilers and other machinery and apparatus necessary for a complete installation has been awarded to the CAMDEN IRON WORKS, Camden, N. J., at $112,500.

LUDINGTON, MICH.—Bids are asked until 2 p. m., March 10, by the Board of Public Works for constructing sewers in various streets. Fred Gallie is City Clk.

PEORIA, ILL.—The City Engineer is preparing plans and specifications for the construction of the North Peoria sewer.

ROCKFORD, ILL.—The City Engineer is preparing plans for the Northeast Sewer District for that section of the city north of State St. on the east side of the river.

PLYMOUTH, WIS.—Bids are asked until 8 p. m., March 10, by C. W. Jackson, City Clk., for the construction of 9,426 ft. of 6-in., 13,783 ft. of 8-in. and 630 ft. of 10-in. vitrified pipe sewers; 410 ft. of 4-in. force main, 84 ft. of 8-in. c.-i. pipe for river crossings. 49 manholes, 28 lampholes and one electric pumping station. W. G. Kirchoffer is Engr., Madison, Wis.

BELLE PLAIN, IOWA.—The City Council on Feb. 6 decided to proceed at once with the construction of a sewer system on the septic tank plan.

ABILENE, KAN.—LYON & SNIDER, Salina, Kan., have been awarded contract for the construction of the sewer in District No. 6 on North Olive and Kuney Sts.

ALLIANCE, NEB.—Bids will be received by the City Clerk until noon, March 2, for sewer work in five districts and for a concrete septic tank, from the plans of Grant & Letton, F. & M. Bldg., Lincoln.

SPUR, TEX.—John B. Hawley, Engr., Fort Worth, Tex., is making surveys for the construction of a sewer system.

ALVA, OKLA.—See item under Streets and Roads.

ALBUQUERQUE, N. MEX.—HASSELMAN & MISSUE, Pueblo, Colo., have been awarded contract, at $60,000, as a sub-contract from Glass & Fischer, for the construction of that portion of the sewer system beginning at the corner of Fourth St. and Stover Ave., and running to Seventh St.

SEATTLE, WASH.—R. H. Thomson, City Engr., estimates the cost of constructing sewers on First Ave. S. at $18,000.

SPOKANE, WASH.—See item under Streets and Roads.

THE DALLES, ORE.—The construction of a sewer system and garbage plant is in contemplation by the city. No plans have been prepared. L. T. Boyle, City Engr., would like to receive catalogs of sewer pipe, manholes, lampholes, castings, catch basins and flush tanks, etc.

NEWMAN, CAL.—The City Council on Feb. 8 awarded contracts for a sewer system to C. VINCENT of Oakland at $23,079, the lowest bid.

SALT LAKE CITY, UTAH.—We are officially advised that contracts were awarded on Feb. 4 by the Board of Public Works for sewer extensions Nos. 220 and 249 to the JAMES KENNEDY CONSTRUCTION CO. of Salt Lake City, at $134,287 and $33,730, respectively. G. F. McGonigle is City Engr.

ORILLIA, ONT.—Bids are asked until 8 p. m., March 7, by C. E. Grant, Town Clk., for sewage pumping machinery comprising gasoline engine, electric motors and centrifugal pumps. Willis Chipman, C. E., is Ch. Engr., 103 Bay St., Toronto.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

NEW HAVEN, CONN.—Bids are asked by C. W. Kelly, City Engr., until 2 p. m., Feb. 28, for furnishing a road oiler having a capacity of not less than 450 gallons.

HARTFORD, CONN.—Plans for proposed state road work have been received by the State Highway Commissioner, Capitol, from R. E. Mitchell, Engr., as follows: Town of Salem, 5,100 lin. ft. on the Colchester-New London Turnpike; 5,700 lin. ft in the town of Colchester on the same road.

*ALBANY, N. Y.—The bids received by the State Highway Commission on Feb. 14 for the construction of State highways were: Reservation-Ovid Road No. 323, Seneca County, length, 3.86 miles: H. C. SCHROEDER, Rochester, N. Y., $41,247 (awarded contract); Guy B. Dickinson, Syracuse, N. Y., $42,091; J. G. Hayes & Co., Big Run, Pa., $44,622; F. A. Brotsch, Jr., Rochester, N. Y., $43,507; Henry P. Burgard Co., Buffalo, N. Y., $45,712; J. H. Conners, Fulton, N. Y., $43,596.

Highland-Gardner Road No. 350, Ulster County, 3.76 miles: GENERAL CONSTRUCTION CO., Bridgeport, Conn., $76,990 (awarded contract); Joseph Walker, New Paltz, N. Y., $79,950; James E. Martin, Poughkeepsie, N. Y., $77,821; Henry P. Burgard Co., Buffalo, N. Y., $86,095; DeGraff & Hogeboom, Bloomington, N. Y., $78,992; Thomas O'Hearn, Yonkers, N. Y., $81,105; Mohawk Engineering & Construction Co., Schenectady, N. Y., $77,987.

Saugerties-Kingston Road No. 5,000, Ulster County, 2.32 miles: JOHN E. CONSAULIS, New York, $24,685 (awarded contract); DeGraff & Hogeboom, Bloomington, N. Y., $25,-400; James E. Martin, Poughkeepsie, N. Y., $28,399; Alonzo Schaupp, Albany, N. Y., $26,170; Henry P. Burgard Co., Buffalo, N. Y., $29,999.

Lloyd-Town Line Road No. 5,001, Milton, Ulster County, 1.57 miles: GENERAL CONSTRUCTION CO., Bridgeport, Conn., $18,998 (awarded contract); Henry P. Burgard Co., Buffalo, N. Y., $21,966; James E. Martin, Poughkeepsie, N. Y., $19,198; DeGraff & Hogeboom, Bloomington, N. Y., $21,000; Mohawk Engineering & Construction Co., Schenectady, N. Y., $19,980; Joseph Walker, New Paltz, N. Y., $21,999.

Canajoharie-Flat Creek Road No. 397, Blaine, Montgomery County, 6.67 miles: JAMES E. MARTIN, Poughkeepsie, N. Y., $73,454 (awarded contract); James Anderson, New Haven, N. Y., $76,202.75; Joseph Walker, New Paltz, N. Y., $78,546; S. B. Van Wagonen, Rondout, N. Y., $76,000; Almaha Construction Co., Albany, N. Y., $84,256.

East Creek-St. Johnsville Road No. 5,028, Montgomery County, 3.73 miles: MOHAWK ENGINEERING & CONSTRUCTION CO., Scehnectady, N. Y., $62,980 (awarded contract); Henry P. Burgard Co., Buffalo, N. Y., $68,025; Brown & Lowe, Schenectady, N. Y., $70,776; Almahar Construction Co., Albany, N. Y., $72,346; Joseph Walker, New Paltz, N. Y., $69,300; James E. Martin, Poughkeepsie, N. Y., $66,498.

Berry Hill Road, No. 548, Nassau County, 7.59 miles: JOHN F. CLANCY, Astoria, L. I., $55,498 (awarded contract); New Commonwealth Construction Co., New York, $64,-862; Barber Asphalt Paving Co., $67,340; Henry J. Mullen, Jamaica, N. Y., $56,994; Henry P. Burgard Co., Buffalo, N. Y., $64,-558; T. L. Hugson, Havana, Cuba, $64,088; Twombly & Eldert, Jamaica, L. I., $60,300; Andrews Brothers, Mineola, N. Y., $65,666; Powers & Wheeler, Oyster Bay, N. Y., $59,-735; Frank J. Gallagher Brooklyn, N. Y., $62,385; Thomas O'Hearn, Yonkers, N. Y., $63,999; Herlihy Construction Co., Glens Falls, N. Y., $61,049.

Mechanicville-Malta Road No. 610, Saratoga County, 7.42 miles: HERLIHY CONSTRUCTION CO., Glens Falls, N. Y., $87,308 (awarded contract); New Commonwealth Construction Co., New York, $97,126; Thomas F. Shaughnessey, Albany, N. Y., $89,640; James Anderson, New Haven, N. Y., $96,607; Gaylord & Fox, Saratoga, N. Y., $102,553; Buckley Construction Co., Plattsburgh, $103,-045; Browne & Lowe, Schenectady, N. Y., $108,429; James E. Martin, Poughkeepsie, N. Y., $95,449; Edward F. Garling, Schenectady, N. Y., $115,740; Henry P. Burgard Co., Buffalo, N. Y., $90,498; Joseph Walker, New Paltz, N. Y., $91,999; Linehan & Burnham Co., Glens Falls, N. Y., $94,396; Newport Construction Co., Newport, N. Y., $109,289.

Waterford Road, No. 842, Sec. 1, Saratoga County, 0.27 miles: KENNEDY & EASTON Albany, N. Y., $3,294 (awarded contract); Barber Asphalt Paving Co., $3,673; Michael F. Dollard, Albany, $4,287; James E. Martin, Poughkeepsie, N. Y., $4,323.

Watertown-Theresa Road No. 565, Sec. 1, Jefferson County, 7.35 miles: HERLIHY CONSTRUCTION CO., Glens Falls, N. Y., $81,851 (awarded contract); P. H. Murray, Rochester, N. Y., $85,537; Burns Bros. & Healy, Watertown, N. Y., $94,599; Buckley Construction Co., Plattsburgh, N. Y., $90,679; Henry P. Burgard Co., Buffalo, N. Y., $93,-383; Newport Construction Co., Newport, N. Y., $94,445; Brown & Lowe, Schenectady, N. Y., $92,927; Semper Bros., Watertown, N. Y., $91,873; A. J. Rockwood, Rochester, N. Y., $89,800; Chambers and Grady, Rochester, N. Y., $87,831.

Carthage-Wilna Road No. 624, Jefferson County, 3.09 miles: P. H. MURRAY, Rochester, N. Y., $35,185 (awarded contract); Buckley Construction Co., Plattsburgh, N. Y., $38,776; Brown & Lowe, Schenectady, N. Y., $42,303; William C. Evans, Ambler, Pa., $43,-527; Burns Bros. & Haley, Watertown, N. Y., $38,514; Semper Bros., Watertown, N. Y., $40,783; Henry P. Burgard Co., Buffalo, N. Y., $38,181.

Black River-Watertown Road No. 5,005, Jefferson County, 4.84 miles: P. H. MURRAY, Rochester, N. Y., $59,400 (awarded contract); Buckley Construction Co., Plattsburgh, N. Y., $67,260; Semper Bros., Watertown, N. Y., $63,763; Henry P. Burgard Co., Buffalo, N. Y., $65,289; Browne & Lowe, Schenectady, N. Y., $70,455; A. J. Rockwood, Rochester, N. Y., $62,500; Burns Bros. & Haley, Watertown, N. Y., $62,289.

Couse-Luther Road No. 583, Rensselaer County, 3.40 miles: W. M. Achison, Troy, N. Y., $37,154 (award pending); Buckley Construction Co., Plattsburgh, N. Y., $46,291; H. P. Sproul, Peekskill, N. Y., $42,000; Joseph Walker, New Paltz, N. Y., $39,950.

Eagle Mills-Clums Corners Road No. 631, Rensselaer County, 2.25 miles: WILLIAM M. ACHISON, Troy, N. Y., $23,076 (awarded contract); Almahar Construction Co., Albany, N. Y., $30,275; Michael F. Dollard, Albany, N. Y., $27,154; James Anderson, New Haven, N. Y., $25,867; Corliss Construction Co., Troy, N. Y., $23,157; H. B. Sproul, Peekskill, N. Y., $28,500.

Schodack Center-Valatie Road No. 5,029, Part 2, Rensselaer County, 2 miles: M. C. Gay, Herkimer, N. Y., $41,000 (award pending); M. F. Dollard, Albany, N. Y., $51,630; Thomas F. Shaughnessy, Albany, N. Y., $44,-062; James Anderson, New Haven, N. Y., $47,176; S. B. Van Wagonen, Rondout, N. Y., $47,939; Mohawk Engineering & Construction Co., Schenectady, N. Y., $47,587; John Harrigan, New York, $41,618; Rockefeller Bros., Brooklyn, $48,985; Lane Construction Co., Meriden, Conn., $45,300; Joseph Walker, New Paltz, N. Y., $47,078; Wiltsie & Rigney, Rensselaer, N. Y., $58,293; Harvey B. Sproul, Peekskill, N. Y., $51,000.

Manchester-Victor Road No. 637, Ontario County, 5.30 miles: HAGAMAN, MILLER & HAGAMAN, $48,517 (awarded contract); H. C. Schroeder, Rochester, N. Y., $50,523; Creedon & Pitou, $53,360; Frederick A. Brotsch, Rochester, $51,829; Guy D. Dickinson, Syracuse, N. Y., $51,849; Monroe Roads Co., Pittsford, N. Y., $52,651; Henry P. Burgard Co., Buffalo, $57,734; Mosier & Summers, Buffalo, $53,268; Whitmore, Rauber & Vicinus, Rochester, $51,575; Hucknall Construction Co., Albion, N. Y., $50,878; Chambers & Grady, Rochester, $49,344.

Geneva Road No. 638, Ontario County, 1.02 miles: F. A. BROTSCH, Rochester, $10,746 (awarded contract); Whitemore, Rauber & Vicinus, Rochester, $10,785; H. C. Schroeder, Rochester, $11,107; J. G. Hayes & Co., Big Run, Pa., $11,262; Honroe Roads Co. Pittsford, $11,241.

Greenwich-Battenville Road, No. 724, Washington County, 3.98 miles: HERLIHY CONSTRUCTION CO., Glens Falls, N. Y. (awarded contract); Buckley Construction Co., Plattsburg, $46,029; James Anderson, New Haven, N. Y., $35,910; Cunningham & Woodward, $37,117; Flood & Van Wirt Co., Sandy Hill, N. Y., $37,264; Almahar Contracting Co., Albany, N. Y., $35,634.

Salem Granville Road No. 5,033, Part 1, Washington County, 2.96 miles: R. HOPKINS, Troy, N. Y., $28,300 (awarded contract); John Harrigan, New York, $29,685; Almahar Contracting Co., Albany, $29,583; Buckley Construction Co., Plattsburg, N. Y., $35,690; Cunningham & Woodward, Sandy Hill, N. Y., $28,929; T. H. Gill Co., Boston, Mass., $31,183; Herlihy Construction Co., Glens Falls, N. Y., $33,229.

State Line-Orangeburg Road No. 728, Rockland County, 2.82 miles: H. G. HERRING, JR., & CO., Hillsdale, N. J., $32,100 (awarded contract); James E. Martin, Poughkeepsie, N. Y., $34,343; General Construction Co., Bridgeport, Conn., $36,000; Henry P. Burgard Co., Buffalo, $37,890; Mohawk Engineering & Construction Co., Schenectady, $33,988; H. B. Sproul, Peekskill, N. Y., $35,-000.

Congers-Long Cove Road, No. 5,002, Rockland County, 1.61 miles: H. B. SPROUL, Peekskill, N. Y., $17,489 (awarded contract); H. G. Herring, Jr. & Co., Hillsdale, N. J., $17, 912; James E. Martin, Poughkeepsie, $19,696; Creedon & Pitou, $22,700; Henry P. Burgard Co., Buffalo, $21,844; General Construction Co., Bridgeport, Conn., $18,790. S. Percy Hooker is Chn. of Comn.

*ALBANY, N. Y.—The following bids for the improvement of public highways by State aid, were received by the State Commission of Highways at its office, 53 Lancaster St., Albany, N. Y., on Feb. 16:

Road No. 735, Potsdam-Colton, St. Lawrence County, 7.90 miles: P. H. Murray, Rochester, N. Y., $94,000; Burns Bros. & Haley, Watertown, N. Y., $101,800; Brown & Lowe, Schenectady, N. Y., $93,569; Buckley Construction Co., Plattsburg, N. Y., $94,-000; A. J. ROCKWOOD, Rochester, N. Y., $91,000 (awarded contract); William C. Evans, Ambler, Pa., $95,300; Joseph H. Conners, Fulton, N. Y., $99,777.

Road No. 5,032, Potsdam-Canton, St. Lawrence County, 5 miles: P. H. MURRAY, Rochester, N. Y., $54,961 (awarded contract); Joseph McCormack, East Providence, R. I., $71,955; Buckley Construction Co., Plattsburg, N. Y., $58,000; Semper Bros., Watertown, N. Y., $59,763; William C. Evans, Ambler, Pa., $59,800; Brown & Lowe, Schenectady, N. Y., $55,089.

Road No. 762, Craryville-State Line, Columbia County, 6.02 miles: Thomas O'Hern, Yonkers, N. Y., $73,763; DeGraff & Hogeboom, Bloomington, $75,000; Lane Construction Co., $75,800; C. L. Huston, Havana, Cuba, $76,511; JOSEPH WALKER, New Paltz, N. Y., $71,487 (awarded contract); Henry P. Burgard Co., Buffalo, $75,000; Joseph McCormack, East Providence, R. I., $84,748.

Road No. 5,004, Blue Stores-Livingston, Columbia County, 2.50 miles: JOSEPH WALKER, New Paltz, N. Y., $30,600 (awarded contract); H. S. Williams, Clermont, N. Y., $31,985; Rockefeller Bros., Brooklyn, N. Y., $32,998; Joseph McCormack, East Providence, R. I., $39,957.

Road No. 776, West Plattsburg, Clinton County, 7.26 miles: BROWN & LOWE, Schenectady, N. Y., $68,356 (awarded contract); Buckley Construction Co., Plattsburg, N. Y., $69,490; Almahar Contracting Co., Albany, N. Y., $73,006; Creedon & Pitou, New York, $78,850.

Road No. 775, Golden's Bridge-Croton Falls, Westchester County, 4.42 miles: Joseph Walker, New Paltz, N. Y., $44,722; Ryan & Yale, Brewster, N. Y., $43,990; Lane Construction Co., Meriden, Conn., $44,383; Malloy & Murray, Yonkers, N. Y., $50,292; Decicco Construction Co., Larchmont, N. Y., $51,408; FRANK G. FOWLER CONTRACTING CO., Mt. Kisco, N. Y., $41,537 (awarded contract); William F. McCabe, White Plains, N. Y., $45,487; H. B. Sproul, Peekskill, N. Y., $41,814; James E. Martin, Poughkeepsie, N. Y., $46,997; F. J. Merritt, White Plains, N. Y., $57,700.

Road No. 780, White Plains Town Line-Harrison, Westchester County, 2.91 miles: A. R. Tibbetts Contracting Co., Mt. Vernon, N. Y., $37,272; James E. Martin, Poughkeepsie, N. Y., $38,674; William F. McCabe, White Plains, N. Y., $34,460; Barber Asphalt Paving Co., New York, $38,121; New Commonwealth Contracting Co., New York, $36,-321; White & Colligan, Purchase, N. Y., $34,-413; H. B. Sproul, Peekskill, N. Y., $36,827; Henry P. Burgard Co., Buffalo, $40,000; Frank E. Murray Contracting Co., Port Chester, N. Y., $37,460; Decicco Contracting Co., Larchmont, N. Y., $42,198 (not awarded).

Road 5,003, Armonk-Byram Lake, Westchester County, 3.44 miles: Henry P. Burgard Co., Buffalo, N. Y., $43,000; Joseph Walker, New Paltz, N. Y., $41,965; Freeman H. Merritt, White Plains, N. Y., $61,-437; Malloy & Murray, Yonkers, N. Y., $49,-499; James E. Martin, Poughkeepsie, N. Y., $46,594; William F. McCabe, White Plains, N. Y., $47,970; Frank C. Fowler Contracting Co., Mt. Kisco, N. Y., $42,682; H. B. Sproul, Peekskill, N. Y., $42,990; Barber Asphalt Paving Co., New York, $46,622; O'Rourke Bros., Yonkers, $43,800 (not awarded).

Road No. 789, Mariaville-Montgomery County Line, Schenectady County, 5.75 miles: Almahar Contracting Co., Albany, $65,781; JOSEPH WALKER, New Paltz, N. Y., $60,-978 (awarded contract); Dorpian City Contracting Co., Schenectady, N. Y., $76,625; James Anderson, New Haven, N. Y., $65,610; James E. Martin, Poughkeepsie, N. Y., $65,-983; Mohawk Engineering & Contracting Co., Schenectady, N. Y., $63,987.

Road No. 5,030, Scotia-Wyatt's, Schenectady County, 2.25 miles: Barber Asphalt Paving Co., New York, $25,735; Corlear Contracting Co., Schenectady, $31,000; C. W. Trumbull, Schenectady, $22,985; Charles D. Boughton, Troy, N. Y., $23,775; Dorpian City Contracting Co., Schenectady, $14,198; James E. Martin, Poughkeepsie, N. Y., $25,470; Alonzo Schaupp, Albany, $23,700; Thomas F. Shaughnessy & Co., Albany, $23,000; Henry P. Burgard Co., Buffalo, $26,000; BROWN & LOWE, Schenectady, $20,862 (awarded contract); James Anderson, New Haven, N. Y., $22,243; John S. Mace, Jr., Watervliet, N. Y., $23,104; Mohawk Engineering & Contracting Co., Schenectady, $21,997.

Road No. 797, Hunter-Windham, Section 2, Green County, 3.39 miles: Thomas O'Hern, Yonkers, N. Y., $41,865; Joseph Walker, New Paltz, N. Y., $42,490; Creedon & Pitou, New

York, $44,800; S. B. VAN WAGONEN, Rondout, N. Y., $39,543 (awarded contract); McNamee & Rice, Rondout, N. Y., $42,600.

Road No. 5,027, Catskill-Saugerties, Part 1, Greene County, 2 miles: DeGRAFF & HOGEBOOM, Bloomington, N. Y., $27,000 (awarded contract); McNamee & Rice, Rondout, N. Y., $27,576; Edward Johnson, Catskill, N. Y., $28,061; Thomas O'Hearn, Yonkers, $27,311; Henry P. Burgard Co., Buffalo, $29,100; John E. Consalus, New York, $27,432; M. F. Dollard, Albany, $30,745.

Road No. 798, Kent-Towner, Putnam County, 2.78 miles: Lane Contracting Co., Meriden, Conn., $46,678; Ryan & Yale, Brewster, N. Y., $43,765; Qohn Qurname, Carmel, N. Y., $44,500; H. B. SPROUL, Peekskill, N. Y., $40,900 (awarded contract); James E. Martin, Poughkeepsie, N. Y., $44,689.

Road No. 5,006, Croton Falls-Brewster, Putnam County, 1.80 miles: James E. Martin, Poughkeepsie, $26,496; Ryan & Yale, Brewster, $24,690; Amos D. Bridges' Sons, Hazardville, Conn., $26,314; Lane Contracting Co., Meriden, Conn., $26,800; H. B. Sproul, Peekskill, $23,990 (not awarded).

Road No. 804, Luzerne-Lake George, Section 1, Warren County, 7.13 miles: Santononi Construction Co., Albany, $83,899; S. B. VAN WAGONEN, Rondout, $73,604 (awarded contract); T. L. Huston, Havana, Cuba, $80,755; Newport Construction Co., Newport, N. Y., $84,720; James Anderson, New Haven, N. Y., $80,890; H. P. Burgard Co., Buffalo, $85,800; Brown & Lowe, Schenectady, $78,273; Almahar Contracting Co., Albany, $74,431; Buckley Construction Co., Plattsburg, $91,420; Creedon & Pitou, New York, $94,450; Joseph Walker, New Paltz, $73,810; Linehan & Burnham, Glens Falls, $81,368.

Road No. 820, Hogansburg-Bombay, Franklin County, 6.52 miles: Burns Bros. & Haley, $59,168; E. H. Murray, Rochester, $54,000; Semper Bros., Watertown, $53,927; Creedon & Pitou, New York, $55,700; Buckley Construction Co., Plattsburg, $53,500; JAMES ANDERSON, New Haven, N. Y., $50,102 (awarded contract); Brown & Lowe, Schenectady, $59,369.

Road No. 5,031, Malone-Moira, Part 2, Franklin County, 2 miles: Burns Bros. & Haley, $42,311; Newport Construction Co., Newport, N. Y., $35,960; James Anderson, New Haven, N. Y., $35,701; E. H. Murray, Rochester, N. Y., $38,500; BUCKLEY CONSTRUCTION CO., Plattsburg, $33,743 (awarded contract); Brown & Lowe, Schenectady, $36,549.

Road No. 821, Saranac Lake-Blookingdale, Essex County, 5.58 miles: Buckley Construction Co., Plattsburg, $59,450; Creedon & Pitou, New York, $61,500; John B. Dower, Ballston, N. Y., $68,854; Almahar Contracting Co., Albany, $61,846; Santononi Contracting Co., Albany, $66,133; James Anderson, New Haven, N. Y., $61,900; Newport Construction Co., Newport, N. Y., $65,800; Brown & Lowe, Schenectady, $64,356; Cunningham & Woodard, Sandy Hill, N. Y., $62,375; T. L. HUSTON, Havana, Cuba, $59,427 (awarded contract).

Road No. 5,011, Ausable Forks-Jay, Essex County, 3.45 miles: Creedon & Pitou, New York, $55,242; Henry P. Burgard Co., Buffalo, $60,000; Buckley Construction Co., Plattsburg, $61,000; Flood & Van Wirt Co., Sandy Hill, $52,959; Thomas O'Hearn, Yonkers, $55,647; Almahar Contracting Co., Albany, $55,747; Brown & Lowe, Schenectady, $55,306; Cunningham & Woodward, Sandy Hill, $54,505; C. F. Jordan Co., Albany, $54,196; John B. Dower, Ballston Spa, $66,245; James Anderson, New Haven, N. Y., $54,970; Herlihy Contracting Co., Glens Falls, $59,733; T. H. Gill Co., Boston, Mass., $54,849; John Harrigan, New York, $54,054; M. F. Dollard, Albany, $56,252; Sherrill Hardware & Plumbing Co., Sandy Hill, $51,106 (not awarded).

Road No. 841, Crown Point-Port Henry, Essex County, 4 miles: Creedon & Pitou, New York, $72,000; Buckley Construction Co., Plattsburg, $73,000; T. L. HUSTON, Havana, Cuba, 556,972 (awarded contract); Newport Construction Co., Newport, $65,280; T. H. Gill Co., Boston, $63,642; Cunningham & Woodward, Sandy Hill, $62,518; Santononi Contracting Co., Albany, $69,574; Brown & Lowe, Schenectady, $58,184.

*ALBANY, N. Y.—The following proposals for the improvement of public highways by State aid were received by the State Commission of Highways, 53 Lancaster St., Albany, N. Y., on Feb. 18:

Road No. 5,009, Pawling Village, Dutchess County, 1.50 miles: H. P. BURGARD CO., Buffalo, $20,874 (awarded contract); James E. Martin, Poughkeepsie, $20,887; Lane Construction Co., Meriden, Conn., $21,106; H. B. Sproul, Peekskill, $20,990.

Road No. 5,007, Newburg-Cedar Hill Cemetery, Orange County, 3.28 miles: McNamee & Rice, Kingston, $34,500; Harper, Java & Keyo, Newburg, $33,919; Mohawk Engineering & Contracting Co., Schenectady, $34,887; Thomas O'Hern, Yonkers, $33,546; C. F. Jordan & Co., $35,062; H. P. Burgard Co., Buffalo, $34,500; Samuel Beskin, Peekskill Landing, $33,500; H. B. Sproul, Peekskill, $36,000; James E. Martin, Poughkeepsie, $35,896; DeGraff & Hogeboom, Bloomington, $36,000; Orange County Road Construction Co., New York, $36,300; Gross, Copus & Spine, Newburgh, $33,812 (not awarded).

Road No. 5,010, Slingerlands-New Scotland, Albany, County, 2 miles: John Harrigan, New York, $24,663; E. J. Doyle, Jr., & Co., $25,728; Creeden & Pitou, New York, $25,980+ C. W. Trumbull, Schenectady, $24,985; John S. Mace, Jr., Watervliet, $23,323; Hohawk Engineering & Contracting Co., Schenectady, $25,977; Alonzo Schaupp, Albany, $23, 790; Dorpian City Contracting So., Schenectady, $23,800; Charles D. Boughton, Troy, $23,276; Joseph Walker, New Paltz, $25,691; H. P. Burgard Co., Buffalo, $25,500; THOMAS F. SHAUGHNESSY, Albany, $22,400 (awarded contract); M. F. Dollard, Albany, $23,311; James Anderson, New Haven, N. Y., $24,490; Barber Asphalt Paving Co., New York, $26,700.

Road No. 5,012, Fleming-Auburn, Cayuga County, 2.75 miles: Monroe Roads Co., Pittsford, $38,364; J. G. HAYES & CO., Big Run; Pa., $35,040 (awarded contract); H. B. Burgard Co., Buffalo, $38,500; Joseph H. Connors & Co., Fulton, $40,234.

Road No. 5,013, Bainbridge-Unadilla, Part 1, Chenango County, 4.13 miles: Newport Construction Co., Newport, $52,024; Guy B. Dickinson, Syracuse, $59,300; Delaware Contracting Co., Sydney, $57,569; John Harrigan, New York, $53,000; Thomas O'Hearn, Yonkers, $58,537; H. P. Burgard Co., Buffalo, $60,500; Edwin D. Baker, $66,630; Chambers & Grady, Rochester, $60,932; Joseph McCormack, East Providence, R. I., $56,740; James Anderson, New Haven, N. Y., $56,413; James E. Martin, Poughkeepsie, $60,974 (not awarded).

Road No. 5014, Chittenango-Oneida, Part 1, Madison County, 3.15 miles: Joseph H. Connors, Fulton, $44,966; Newport Contracting Co., Newport, $46,000; H. P. Burgard Co., Buffalo, $45,900; Conroy & Nexdorph, $44,112; Guy B. Dickinson, Syracuse, $43,909; JAMES ANDERSON, New Haven, N. Y., $43,300 (awarded contract); P. H. Murray, Rochester, $47,000; F. L. Sporrotto, Syracuse, $47,085; Tyler & French, Chittenango, $45,194.

Road No. 5,016 Camillus-Fairmount, Onondaga County, 3.09 miles: F. D. Paddock, Memphis, $42,000; H. P. Burgard Co., Buffalo, $39,800; Guy B. Dickinson, Syracuse, $39,247; JOHN A. WIEDMAN, Syracuse, $39,000 (awarded contract); James Anderson, New Haven, $40,982; Albert Gaffey, Syracuse, $40,006; F. L. Sporrotto, Syracuse, $40,078.

Road No. 5,017, Clyde-Savannah, Part 2, Wayne County, 3 miles: Joseph P. Sweeney, $41,499; H. P. Burgard Co., Buffalo, $40,000; James Anderson, New Haven, $39,074; Monroe Roads Co., Pittsford, $38,156; C. D. McComb, Syracuse, $38,977; P. H. Murray, Rochester, $38,000; M. F. DOLLARD, Albany, $37,033 (awarded contract); Guy B. Dickinson, Syracuse, $39,145; Greece Construction Co., Rochester, $38,718.

Road No. 5,018, Reading-Dundee, Part 1, Yates County, 2 miles: James Anderson, New Haven, $26,985; P. H. Murray, Rochester, $27,900; Creeden & Pitou, New York, $26,890; MONROE ROADS CO., Pittsford, $26,059 (awarded contract); H. P. Burgard Co., Buffalo, $28,400.

Road No. 5,019, Lake Shore-Lackawanna City, Erie County, 1.89 miles: F. J. Mumm, Buffalo, $43,500; H. P. Burgard Co., Buffalo, $40,425; F. D. C. Bardell, Buffalo, $40,900; H. C. Schroeder, Rochester, $42,857; HAGAMAN, MILLER & HAGAMAN, Rochester, $36,163 (awarded contract); L. H. Guipp Contracting Co., Buffalo, $39,537; F. L. Cohen, Buffalo, $44,100; Mosher & Summers, Buffalo, $43,988; Julius Frederick Co., Rochester, $46,300; C. Aikenhead Co., Rochester, $44,100; Constantine Contracting Co., Buffalo, $48,850; Thomas Fitzgerald, Fredonia, $42,000; E. M. Love & Son, Corey, Pa., $44,987.

Road No. 5,020, East Pembroke-Pembroke, Genesee County, 3.46 miles: Frank L. Cohen, Buffalo, $44,800; Joseph Dunphy, Syracuse, $43,670; Thomas Sweeney Co., Pittsburg, Pa., $42,589; F. A. Brotsch, Jr., Rochester, $44,674; Julius Frederick Co., Rochester, $44,800; Frank D. G. Bardell, Buffalo, $44,000; Whitmore, Roeber & Biancennes, $43,498; Bush & Percival, Buffalo, $45,361; F. J. MUMM, Buffalo, $39,774 (awarded contract); F. W. Knickenburg, Buffalo, $43,512; Barber Asphalt Paving Co., Buffalo, $44,854; Chambers & Grady, Rochester, $43,096.

Road No. 5,021, LeRoy-Caledonia-Mumford, Livingston County, 3.98 miles: Monroe Roads Co., Pittsford, $50,314; JAMES ANDERSON, New Haven, $45,830 (awarded contract); F. A. Brotsch, Rochester, $55,804; Joseph Dunfee, Syracuse, $50,989; Frank D. G. Bardell, Buffalo, $51,000; Whitmore, Rauber & Vincennes, $48,675; Bush & Percival, Buffalo, $57,337; F. L. Cohen, Buffalo, $56,200; Mosier & Summers, Buffalo, $52,299; Julius Frederick Co., Buffalo, $50,900.

Road No. 5,025, Albion-Holley, Orleans County, 2.46 miles: Joseph Dunfee, Syracuse, $27,308; THOMAS HUCKNALL, Albion, $24,000 (awarded contract); Monroe Roads Co., Pittsford, $26,629; F. D. G. Bardell, Buffalo, $27,000; Greece Construction Co., Rochester, $26,621; H. C. Schroeder, Rochester, $27,000; Julius Frederick Co., Buffalo, $27,600; Hagaman, Miller & Hagaman, Rochester, $28,090; F. A. Brotsch, Jr., Rochester, $26,000; F. L. Cohen, Buffalo, $27,200; F. J. Munn, Buffalo, $25,899; R. J. Cole, Clarendon, $24,800.

Road No. 5,024, LeRoy-Warsaw, Wyoming County, 2.67 miles: James Anderson, New Haven, $35,568; F. D. G. Bardell, Buffalo, $35,000; THOMAS MURRAY, LeRoy, $33,000 (awarded contract); Frank L. Cohen, Buffalo, $40,300; Joseph Dunfee, Syracuse, $35,749; Bush & Percival, Buffalo, $41,734.

Road No. 5,022, Binghamton-Windsor, Part 2, Broome County, 3 miles: Edwin D. Baker, Binghamton, $45,838; CREEDEN & PITOU, New York, $41,890 (awarded contract); F. D. G. Bardell, Buffalo, $44,000; Henry B. Sproul, Peekskill, $42,600; Delaware Construction Co., Sidney, $45,366.

Road No. 5,023, Cuba-Black Creek, Part 1, Allegany County, $2.67 miles: E. M. Love & Son, Corey, Pa., $37,727; Monroe Roads Co., Pittsford, $35,636; F. D. G. Bardell, Buffalo, $34,000 (not awarded).

Road No. 5,026, Corning-Painted Post, Steuben County, 3.56 miles: E. M. Love & Son, Corey, Pa., $54,771; John C. Bradley, Corning, $49,990; Monroe Roads Co., Pittsford, $51,291; Flood & Van Wert Co., Sandy Hill, $51,000; F. V. E. BARDOL, Buffalo, $48,500 (awarded contract); Creeden & Pitou, New York, $48,700; E. D. Baker, Binghamton, $56,482.

Road No. 5,043, Oneida-Castle Village-Vernon Village, Oneida County, 1.5 miles: M. F. DOLLARD, Albany, $16,632 (awarded contract); Tyler & French, $19,930; P. H. Murray, Rochester, $16,750; Hyde, Hyde & Hyde, $16,835; Newport Construction Co, Newport, $17,027; Conroy & Nexdorph, Oneida, $17,134; Charles R. Lewis, Ilion, $16,985.

Road No. 5,035, Monticello-Liberty, Part 1, Sullivan County, 2.5 miles: McNamee & Rice, Kingston, $35,500; Alamahar Construction Co., Albany, $34,800; Creeden & Pitou, New York, $36,980; William C. Evans, Ambler, Pa., $36,962; H. P. Burgard Co., Buffalo, $35,500; H. B. Sproul, Peekskill, $37,600; DEGRAFF & HOGEBOOM, Bloomington, $32,989. (awarded contract); James E. Martin, Poughkeepsie, $36,884.

NEW YORK, N. Y.—Bids are asked by George Cromwell, Pres. Boro. of Richmond, until noon, March 8, (1) for furnishing and delivering 12,000 tons of broken stone and screenings of trap rock or Staten Island syenite in stone district No. 1; (2) for furnishing and delivering 12,000 tons of broken stone and screenings of trap rock or Staten Island syenite in stone district No. 2; (3) for furnishing and delivering 12,000 tons of broken stone and screenings of trap rock or Staten Island syenite in stone district No. 3.

WASHINGTON, IND.—Bids are asked by the Commissioners of Daviess County until 2 p. m., March 7, for the construction of the Beckett gravel road. Thomas Nugent is County Audr.

TOMS RIVER, N. J.—The contract for resurfacing with stone a road in Township of Brick has been awarded to J. L. LE COMPTE, of Lakewood, N. J., at $10,488, and the contract for resurfacing with gravel a road in Township of Brick (bids opened Feb. 14) has been awarded to L. H. HOLMAN & BRO., of Whitesville, at $6,984. James E. Otis, Tuckerton, is Dir. Bd. of Chosen Freeholders. Bids were received on Feb. 14.

PITTSBURG, PA.—Bids will be received until 4 p. m., March 8, by the County Commissioners at Pittsburg for paving with brick on Walnut St. in Versailles Township, Allegheny County. R. J. Cunningham is County Controller; D. E. Foster is County Road Surv.

Bids are asked by the Department of Public Works, until 10 a. m., Feb. 28, for grading, curbing and paving with sheet asphalt, Medford St., from Brushton Ave. to Hamilton Ave.; and with vitrified brick in Roma Alley, from Elizabeth St. to Courtland St. William A. Magee is Mayor; Joseph G. Armstrong is Dir. Dept. Pub. Works.

WASHINGTON, D. C.—Bids were received on Feb. 3, by the Commissioners of the District of Columbia for furnishing 800,000 (more or less) asphalt paving blocks for paving the Union Station Plaza and surrounding streets. The contract has been let to the WASHINGTON ASPHALT BLOCK & TILE CO., South Capitol and R Sts., Washington, at $56 per 1,000 for 120-ton compression blocks.

PALATKA, FLA.—The contract for constructing a hard surfaced road has been awarded to H. D. ATKINSON, of Palatka, at $11,346. S. Worden is Secy. Putnam County Bond Trustees.

GADSDEN, ALA.—The City Council has awarded the contract for cement sidewalks on Seventh and Eighth Sts. and Harralson Ave. to C. O. DUNCAN, of Gadsden, at about $10,000.

COLUMBUS, OHIO.—Ordinances are pending in the City Council of Columbus, declaring it necessary to improve Mt. Vernon Ave., from St. Clair Ave. to 20th St.; Leonard Ave., from Galloway Ave. to Denmead Ave.; Eastwood Ave., from Winner Ave. to Taylor Ave.; Goodale St., from Michigan Ave. to Olentangy River; Siebert St., from Parsons Ave. to the second alley west of Heyl Ave.; Seventh St., from Main St. to Livingston Ave.; the alley south of Buckingham St.; Grant Ave., from Mt. Vernon Ave. to Buckingham St.; Grant Ave., from Naghten St. to Mt. Vernon Ave.; Eleventh Ave., from High St. to Neil Ave.; Clifton Ave., from Taylor Ave. to Parkwood Ave.; Gibon St., from Mt. Vernon Ave. to Atcheson St.; Wales Ave., from Grant Ave. to Washington Ave.; and 42 other streets and alleys. Henry Maetzel is City Engr.

Bids will be received until Feb. 28 by the Board of Public Service for furnishing approximately 100 tons of refined asphalt to be delivered f. o. b. cars Columbus. H. S. Holton is Dir.

BOWLING GREEN, OHIO.—Bids are asked until 1 p. m., March 1, by F. W. Toan, County Audr., for the construction of 23 miles of macadam road, including draining and grading. The roads to be improved consist of six sections. E. F. Metzger is County Surv.

HAMILTON, OHIO.—We are officially advised that the following bids were received on Feb. 14, by James C. Wonders, State Highway Comr., Columbus, for constructing State Highway B, Hamilton and Millville Road, Butler County: O. E. Robinson, of Cincinnati, Ohio, water bound macadam, $18,400; tar or asphalt macadam, $18,500; Garver Contracting & Transfer Co., Hamilton, Ohio, water bound macadam, $15,253; tarvia bound macadam, $18,462; standard oil binder, $18,822; carbovia, $19,000; Horace Shields, Hamilton, Ohio, water bound macadam, $16,858; tarvia macadam, $18,889; carbovia macadam, $18,889; standard macadam binder, $18,739; A. WIRTZ TRANSFER CO. & JOHN H. TRUNCK, Hamilton, Ohio, water bound macadam, $15,049 (awarded contract); tarvia or carbovia, $18,888; taroid or carbovia, $18,888; Indian Refining Co. treatment, $18,503; Standard Oil Co., asphalt treatment, $18,233.

DAYTON, OHIO.—We are officially advised that the City Council has decided to pave Germantown St. with asphalt or brick. Fred J. Cellarius is City Engr. There will be 5,040 sq. yds. of brick paving to cost $11,000. Noted on Feb. 3.

TOLEDO, OHIO.—Bids will be received until March 4 by the County Commissioners at Toledo for grading, draining and macadamizing a road in Washington and Sylvania Townships. C. J. Sanzenbacher is County Audr.

WADSWORTH, OHIO.—Bids will be received until Feb. 28 by the Village Council for curbing and paving with brick about one mile on South Main St. L. F. Allen is Village Clerk.

ASHLAND, OHIO.—Bids will be received until March 5 by the Clerk of the Board of Trustees of Clearcreek Township, at Ashland, for furnishing material and macadamizing 3¾ miles of roads in said township. There will be required 23,900 cu. yrs. of excavation and 22,015 sq. yds. of [illegible]avel macadam roadway. T. Brindle is [illegible]gr., Ashland.

CANTON, OHIO.—Bids will [illegible] received March 22 for about 12,300 lin[illegible] of curb and 61,120 sq. ft. flagstone wa[illegible] on South Dewalt and North and Sou[illegible] Clarendon Aves. P. H. Weber is City Eng[illegible]

CINCINNATI, OHIO.—The B[illegible] of Control has decided to accept the [illegible] of BOLLMAN & AGNUS for laying a [illegible]ite pavement on Fourth St. from Smi[illegible] St. to the end of the granite improvement [illegible] of Vine St., at $42,590.

ORRVILLE, OHIO.—Bids will [illegible] received by F. E. Wolfe, Clerk of th[illegible] Village of Orrville, until noon, March 12, [illegible] the improvement of Mohican Ave., co[illegible]encing at the south curb line of West [illegible]rket St., thence south to Terminal St.

MARION, IND.—Bids are as[illegible] by the Commissioners of Grant County u[illegible] 2 p. m., March 7, for constructing 5,310 [illegible] of stone road in Liberty Township, and [illegible] paving with brick portions of North M[illegible]ison and First and Fourth Sts., in the to[illegible] of Fairmont. A. Y. Stout is County A[illegible]r.

LAPORTE, IND.—Bids are a[illegible] by the Commissioners of Laporte County [illegible]til 10 a. m., March 12, for construction [illegible] two macadamized roads, one in New Du[illegible] Township and one in Center Townshi[illegible] .280 and 4,917 ft. in length, respectively. [illegible]arles H. Miller, County Audr.

FOWLER, IND.—Bids are ask[illegible] by the Commissioners of Benton County [illegible]ntil 1 p. m., March 8, for the construc[illegible] of 15 gravel and stone roads. Bids [illegible] be received also for the construction o[illegible] two stone roads, each three miles in length, beginning in the town of Fowler. Lemuel [illegible]ipman is County Audr.

COLUMBUS, IND.—Bids are as[illegible] by the Commissioners of Bartholomew C[illegible]nty until 10 a. m., March 7, for the cons[illegible]uction of 2.10 miles of macadamized road in Hawcreek Township. John M. Davis is Coun[illegible] Audr.

MUNCIE, IND.—Bids are aske[illegible] by the Commissioners of Delaware Coun[illegible] until 10 a. m., March 9, for the construc[illegible]on of a brick road in Center Township, kn[illegible] as the E. G. Clark Road. Joseph E. Davis is County Audr.

MUNCIE, IND.—The Commissioners of Delaware County have ordered plans and specifications for paving Kilgore Ave. and York Township Pike with brick. Bids will be in order soon.

GREENSBURG, IND.—Bids are asked by Frank E. Ryan, Audr. of Decatur County, until 1 p. m., March 7, for the construction of 1½ miles of macadamized road in Clay Township.

KOKOMO, IND.—Bids are asked by the Commissioners of Howard County until 2 p. m., March 9, for the construction of three gravel roads, one each in Honey Creek, Taylor and Ervin Townships and each road about three miles in length.

WABASH, IND.—Bids are asked by the Commissioners of Wabash County until 1.30 p. m., March 8, for the construction of three miles of gravel road in Lagro Township, and 1½ miles of gravel road on line between Lagro and Chester Townships. J. P. Noftzger is County Audr.

VINCENNES, IND.—Bids are asked by J. T. Scott, Audr. of Knox County, until 2 p. m., March 8, for the construction of four gravel roads in Busseron Township: Road No. 1, 4,315; Road No. 2, 4,880; Road No. 3, 3,400, and Road No. 4, 3,065 ft. in length, respectively.

HARTFORD CITY, IND.—Bids are asked by the Commissioners of Blackford County until noon, March 7, for the construction of 10,525 ft. of macadam road in Jackson Township and 14,820 ft. of macadam road in Jackson and Lieking Townships. L. W. Daugherty is County Audr.

PERU, IND.—Bids are asked by the Commissioners of Miami County until noon, March 9, for the construction of 15,840 ft. of gravel roads in Pine Creek Township, 16,464 ft. of gravel roads in Jefferson Township, and 24,393 ft. of gravel roads in Township Line Road known as the Zook Road. Charles Griswold is County Audr.

TIPTON, IND.—Bids are asked by the Commissioners of Tipton County until 10 a. m., March 7, for the construction of a crushed stone road in Jefferson Township; a gravel road in Prairie Township; a stone road in Liberty Township, and a gravel road in Wildcat Township. J. F. Barlow is County Audr.

INDIANAPOLIS, IND.—The Commissioners of Marion County are preparing to ask for bids for the construction of three miles of brick road in Perry Township. Albert Sahm is County Audr.

LOGANSPORT, IND.—Bids are asked by the Commissioners of Cass County until 2 p. m., March 7, for the construction of the McCoy road in Miami Township. George W. Cann is County Audr.

FORT WAYNE, IND.—Bids are asked by the Commissioners of Allen County until 9 a. m., March 2, for the construction of a macadamized road in Madison Township. George W. Lindemuth is County Audr.

PAOLI, IND.—Bids are asked by the Commissioners of Orange County until March 8 for the construction of the following macadamized roads: Road No. 1, Saltil[illegible]ville road in Northeast Township, 12,379 ft. [illegible] length; Road No. 1, New Albany road in F[illegible]uch Lick Township, 11,297 ft. in length; R[illegible]d No. 1, Newton Steward road in Greenfield Township, 9,240 ft. in length; Road No. [illegible] English road in Greenfield Township, 9,[illegible]9 ft. in length. A. B. Ham is County Au[illegible]

BRAZIL, IND.—Bids will be rec[illegible]ved until 11 a. m., March 11, by the Board o[illegible] Commissioners of Clay County, in the A[illegible]itor's office in Brazil, for constructing [illegible]08 ft. of gravel road in Washington Towns[illegible]p. James L. Burns is County Audr.

CRAWF[illegible]DSVILLE, IND.—Bids will be received [illegible] March 8 by the Board of County [illegible]missioners for constructing the Otis Th[illegible]on, et al, roads in Madison Township.

GRAN[illegible]APIDS, MICH.—Louis W. Anderson, Cit[illegible]gr., has presented a number of approxi[illegible] estimates to the Board of Public Wor[illegible] The estimates were for sewers and st[illegible] improvements. The street estimates fo[illegible]: Grading and graveling Neland Ave., [illegible] Fifth Ave. to Alexander Ave., $9,620; [illegible] and paving Fifth Ave. with asphal[illegible] bituminous macadam, from Grandville to [illegible]frey Aves., $14,510; grading and paving [illegible]is Court with asphalt macadam or bitu[illegible]us macadam from Lyon Ave. to Willow [illegible]rt, $2,160; grading and graveling Fourth [illegible] from North Front St. to Valley Ave., [illegible]50; same with bituminous poured macad[illegible] $35,820; macadamizing same, $36,020; [illegible] and graveling Neland Ave., $5,980; [illegible]ng and paving Fifth Ave. with brick [illegible] concrete base from Grandville to Godfr[illegible]Aves., $14,550; grading and graveling W[illegible]or Ave. from Fifth to Alexander Aves., [illegible]0,180; grading and paving Livingston A[illegible] with brick on a concrete base from Hastin[illegible] to Trowbridge Sts., $2,610; grading and [illegible]adamizing Fourth St. from North Front [illegible] Stocking Sts., $17,750; paving with bitumi[illegible]s macdam the same, $17,670; gradin[illegible] and graveling same, $12,230.

LA [illegible]RANGE, ILL.—Bids are asked by the Board [illegible] Local Improvement until Feb. 25 for gr[illegible]ding, curbing and paving Hill Grove Ave., requiring about 6,402 sq. yds. of brick paving, 5,000 lin. ft. of concrete curb, etc. W. B. Ewing is Engr., 1003 Chamber of Commerce Bldg., Chicago.

PEORIA, ILL.—Bids for resurfacing Seventh Ave. with asphalt were received as follows on Feb. 8: George A. Peters, Sycamore, Ill., for Obispo, $15,136; J. F. Hill, Chicago, Gilsonite, $15,254; Capital City Concrete Construction Co., Springfield, Sarco, combination of Gilsonite and Kansas oil, $15,703; J. W. Bushell, Peoria, Bermuda, $15,987.

MANITOWOC, WIS.—Bids will be received until 11 a. m., March 1, for about 31,726 sq. yds. of paving. Arthur Reichert is City Clerk.

BURLINGTON, WIS.—Bids will be received until March 15 by P. J. Hurtgen, City Engr., for paving. The work includes 10,321 sq. yds. of brick on 6-in. concrete base; 2,500 lin. ft. of cement curb, etc.

RACINE, WIS.—Bids are asked by the Board of Public Works, P. H. Connolly, Chn., until March 5 for paving with brick, portions of Eleventh and Racine Sts.

PLYMOUTH, WIS.—Bids are asked until 8 p. m., March 10, by C. W. Jackson, City Clerk, for 10,756 sq. yds. of paving on Eastern Ave., Mill and Stafford Sts.; 4,549 lin. ft. of curb and gutter, 165 lin. ft. of plain curb. Bids for the pavement will be received on the following plans: (1) Blome granitoid concrete pavement, (2) reinforced concrete pavement, (3) tar or asphalt macadam (including patented pavements), and (4) vitrified paving brick. W. G. Kirchoffer is City Engr.

OSHKOSH, WIS.—Bids are asked until 2 p. m., March 3, by the Board of Public Works for grading, curbing and repaving West Irving St., from Main St. to the west line of Jackson St., with a permanent pavement having a concrete foundation and a wearing surface either of brick, creosote blocks, cement, Blome Co. patented granitoid concrete pavement, rock-asphalt, sheet-asphalt, or tar macadam.

DES MOINES, IOWA.—Bids will be received until Feb. 25 by the City Council for paving with No. 1 vitrified brick portions of East Third, East Fourth Sts. and Postal Ave., in all 16,503 sq. yds. George F. Poorman is City Clerk.

WASECA, MINN.—Bids are asked by John Madigan, City Clerk, until March 8, for about 118,916 sq. ft. of pavement and 7,428 ft. of curb.

FAIRMONT, MINN.—Bids will be received by H. P. Edwards, County Audr., until March 3, for constructing State Road No. 1.

OTTAWA, KAN.—Bids will be received until March 2 by F. A. Marcell, City Clerk, for grading, curbing and macadamizing with a bituminous binder portions of Fourth, Fifth, Ash and other streets, in all 38 blocks, or about 55,000 sq. yds. macadam, and 20,000 lin. ft. concrete curb and gutter. Bids will be considered for concrete, vitrified brick and Imperial pavement also.

OMAHA, NEB.—Bids are asked until 11 a. m., March 7, by Capt. F. C. Bolles, Q. M., Omaha, for constructing brick pavements, gutters, retaining wall, etc., at Omaha Depot.

JEFFERSON BARRACK, MO.—We are officially advised that bids were received on Feb. 5 by Capt. Stanley H. Ford, Q. M., U. S. A., for constructing roads, walks, etc., at this post. The contract has been awarded to the RUPRECHT VOLNAL CONSTRUCTION CO., 8011 South Broadway, St. Louis, Mo., at $4,673.

EL PASO, TEX.—We are officially advised that the TEXAS BITULITHIC CO. has secured the contract for 10,602 sq. yds. of bitulithic pavement on South Stanton St.

ALVA, OKLA.—We are officially advised that the city of Alva has awarded contract to G. A. HEMAN, of Chickasha, Okla., at $50,457, for paving and sewer work. A. K. Hubbard is City Engr. Itemized bids are given this week under Contract Prices.

BELLINGHAM, WASH.—The contract for paving with brick and constructing concrete sidewalks on a portion of Railroad Ave. is reported awarded to J. LICH at $16,989.

SPOKANE, WASH.—Bids for sewers, sidewalks and grading, estimated to cost $37,260, and to be done during the early spring, were received by the Board of Public Works on Feb. 7. Awarding contracts was postponed. The contracts with the bidders were as follows: Grade and sidewalk, Carlisle Ave., Ruby to Mill Sts., estimated cost $10,900; J. C. Kennedy, $10,400; Massie Bros. & Long, $9,979; Mitchell Bros., $10,650; C. M. Payne, $9,695; W. O. Shawgo, $10,783; Naylor & Norlin, $10,440; Sigley Contracting Co., $10,700. Grade and sidewalk, Latawah St., 16th to 18th Aves., estimate $3,070; Thomas Malony, $3,475; J. C. Kennedy, $2,960; Sibley Contracting Co., $3,000. Grade and sidewalk, Stevens St., 17th to 18th Aves., estimate $840; Massie & McKay, $890; Thomas Malony, $872; J. C. Kennedy, $940. Grade and sidewalk, 36th Ave., Perry to Grand Sts., estimate $8,800; J. C. Kennedy, $8,690; Massie Bros. & Long, $8,495; Mitchell Bros., $9,100; Sibley Contracting Co., $10,000. Grade and sidewalk, 32d Ave., Perry to Arthur Sts., estimate $7,910; J. C. Kennedy, $9,600; Mitchell Bros., $8,700; Sibley Contracting Co., $8,500. Sewer, Augusta Ave., Washington to Lincoln Sts., estimate $3,393; Lang & Smith, $3,690; J. C. Broad, $3,263.

LOS ANGELES, CAL.—Bids will be advertised for soon by the Board of Supervisors for constructing highways in this county. George Bixby is Chn. Highway Comn.

WINNIPEG, MAN.—Bids are asked until 11 a. m., March 1, by the Chairman of the Board of Control for a railway asphalt plant, complete. M. Peterson is Secy.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

CLINTON, MASS.—A mill, 150 × 450 ft., four stories high, will be erected by the management of the Lancaster Mills.

WOONSOCKET, R. I.—The Nyawza Mills have been incorporated at Boston, Mass., with a capital stock of $500,000. A brick mill will be erected. John W. Farwell is Pres., Cohasset, Mass.

THOMPSONVILLE, CONN.—The Hartford Carpet Corporation will begin immediately the construction of an additional factory. The structure will be of brick, three stories high, 120 × 389 ft. It will be used for the construction of Axminster carpets.

HARTFORD, CONN.—The Universal Machine Screw Co. has acquired a tract of land on Windsor St. and will use it as the site for a new plant. The details will be decided upon soon. F. Goodwin Smith has been elected Treasurer of the company.

STAMFORD, CONN.—It is proposed to erect an additional building at the plant of the Yale & Towne Mfg. Co., at Stamford, 200 × 50 ft., six stories high, with a capacity of about 84,000 sq. ft., mill construction. Plans and specifications are being prepared by Charles T. Main, Mill Engr. and Arch., 210 Devonshire St., Boston, Mass., and Francis Bros. & Jellett, Inc., Engrs., Philadelphia, Pa., and will be ready for bids by the latter part of February or the first of March. All estimates are to be furnished to the company direct. Noted Feb. 10.

MANCHESTER, CONN.—The Glastonbury Knitting Co., manufacturers of knit goods, will double the capacity of its plant at Manchester Green. A 2-story brick addition, approximately 50 × 150 ft., will be erected.

BROCKTON, MASS.—The Old Colony Street Ry. Co., Boston, Mass., will let contracts for building a storage car house at Brockton to have a capacity of about 65 cars. Robert S. Goff is Gen. Mgr.

LOWELL, MASS.—Through the $1,200,000 increase in capital of the Massachusetts Mills Co., extensive additions will be made to the plant. The carding mill extension will be 125 × 95 ft., five stories high, and end on the new Concord River line. Additions to the spinning and weaving mill fronting on Merrimack St. will be 310 × 90 ft., five stories high, and will extend from Canal St., across the canal and down to Concord River. On land to be reclaimed from Merrimac River, there will be erected a boiler-house, 285 × 50 ft., with a chimney 250 ft. high. It will take nearly two years to complete the extension.

BOLIVAR, N. Y.—The Bolivar Gasoline Co. will build a factory at a cost of $20,000. The capacity of the plant will be about 400,000 ft. of gas daily.

GARDEN CITY (L. I.), N. Y.—We are officially advised that Doubleday, Page & Co., publishers, 133 East 16th St., New York, will erect a printing plant at Garden City. The building will be 346 × 200 ft. and in the center will be an open court, 100 × 200 ft. The structure will be two stories high on three sides, the rear having but one story. It will be of Gothic architecture. The printing and binding plant, stock rooms, paper storage, packing and plate rooms will be on one floor. On the second floor, immediately over the press room, will be the composing room, the photo-engraving plant, and the electrotype foundry. The remainder of the second floor will be devoted to the offices of the firm, editorial rooms, cashier's and bookkeeping departments, subscription clerks, mail order department, etc. A kitchen, dining room and a few bedrooms are included. A railroad siding is to be built to connect the plant with the Long Island R. R. Estimates will be received until Feb. 28. Kirby, Petit & Green, 103 Park Ave., New York, are Archs.

BUFFALO, N. Y.—R. J. Reidpath & Son, Archs., Builders' Exchange, are preparing plans for an addition to the factory of the H. H. Franklin Auto Co., to cost $120,000. It will be five stories high, 298 × 107 ft.

SYRACUSE, N. Y.—The H. H. Franklin Mfg. Co., of Syracuse, manufacturer of automobiles, has decided to construct an addition to its plant. Dodge & Day, 608 Chestnut St., Philadelphia, are Engrs.

SYRACUSE, N. Y.—Plans will be prepared by Gaggin & Gaggin, Archs., University Block, for the proposed shoe factory to be built by H. H. Gray's Son at North Salina, Salt and Laurel Sts., in the spring. The building will be five stories high, and will cover a plot 175 × 76 ft.

HARRISBURG, PA.—Plans have been completed by Shaffer & Co., Harrisburg, for a foundry building about 100 × 120 ft., in which to make brass specialties.

ERIE, PA.—The General Electric Co. will erect a plant at Erie, Pa., 20% larger than the present Schenectady plant, it is stated. Work will be begun in the spring, when a grey iron foundry and pattern shop will be erected. Engineers have laid out the factory site, plans having been accepted for a plant of 58 buildings, covering a ground area of 75 acres and floor area of 150 acres, also 36 miles of track and eight miles of roadway. Twenty buildings are 800 ft. in length and of varying widths; several are of five stories.

CONNELLSVILLE, PA.—GEORGE J. HAGAN, of Pittsburg, has secured a contract from the Sligo Iron & Steel Co., Connellsville, Pa., for erection of a coal fired faggot heating furnace.

PHILADELPHIA, PA.—James G. Doak & Co., 1240 Chestnut St., have posted plans for the erection of a 6-story factory building at 233 South 32d St., for Mershaw Bros. The building will be of brick with a frontage of 28 ft. and a depth of 200 ft., and will cost $50,000.

The Manor Real Estate & Trust Co., a holding corporation for the Pennsylvania R. R. Co., has sold to the Real Estate Holding Co. a tract of ground comprising almost four acres adjoining the corner of Germantown Ave. and Cresheim Road for a consideration of $10,000. The ground will be used as the site for a car board to be built by the Philadelphia Rapid Transit Co. as a terminus for its new car line from Mount Airy. The Real Estate Holding Co., which took title, is a holding corporation for the Philadelphia Rapid Transit Co.

The United Gas Improvement Co. is planning to build a factory on the site of the Gloucester Mfg. Co., now partly occupied by the Welsbach Light Co.

FREDERICK, MD.—The Frederick Ry. Co. will let contract for building car shops soon. W. S. Taylor is Gen. Mgr.

LUMBERTON, N. C.—The incorporators of the Jennings Cotton Mills, of Lumberton, N. C., are arranging to effect organization and determine details of their proposed plant. As soon as the engineer in charge is named, the plans and specifications will be prepared. The company has a capital stock of $500,000 and the principal promoters are H. B. Jennings and L. H. Caldwell.

NEWELLS, N. C.—A. C. Hutchinson, of Charlotte, N. C., is interested in a proposition for building a cotton factory at Newells, N. C. An equipment of 15,000 to 20,000 spindles is contemplated, which would mean the investment of probably $350,000 to $400,000. The Southern Power Co. probably will furnish electricity for operating the new plant.

ANNISTON, ALA.—The pattern shop and foundry of the Lee Foundry Co., Anniston, Ala., which recently burned, will be rebuilt for larger capacity. Electric power is to be used. A cupola furnace, crane, compressor, etc., are among the requirements of the plant.

ALLIANCE, OHIO.—Architects are at work drawing plans and specifications for two buildings to be erected by the McCaskey Register Co. to parallel the Cleveland & Pittsburg R. R., east of the present McCaskey works. One of these buildings will be 200 ft. long and 50 ft. wide, and the other will be 200 ft. long by 40 ft. in width. The buildings will extend east from the present buildings to the land occupied by the Baugh foundry, and so constructed that the buildings may later be continued eastward to Fifth St. The Baugh land is not available until August, and this is the reason the buildings cannot be completed, and their length is confined to 200 ft. at present. These buildings will be of brick, to correspond with the present buildings in external appearance, and will be made as nearly fireproof as possible. The company will build an office building also to accommodate the office force. The main building will have another floor for a work shop added in addition to the two buildings to be built by the company. Work on these buildings will begin as soon as the plans are completed by the architects.

LORAIN, OHIO.—The Marine Electrical Construction Co., which was recently incorporated by A. B. Walton, A. H. Babcock and others, for the manufacture of an electrical sounding device, which was patented by Mr. Walton and which will be used for taking soundings from vessels by electrical appliances, has decided to begin the manufacture of the product at a very early date. A factory building is to be erected in proximity to the ship yards and a force of men employed to manufacture the device. The details of the construction of the building has not been completed, nor the exact location chosen, but it has been determined to erect the plant soon on the east side of the river.

CINCINNATI, OHIO.—The Cincinnati "Times-Star" has filed an application for a permit to erect a 7-story concrete, steel, brick and stone newspaper printing establishment at 602 Walnut St., to cost about $50,000.

INDIANAPOLIS, IND.—The Enterprise Foundry & Fence Co., Indianapolis, has bought the property of the Mainland Mfg. Co. at 24th and Yandes Sts. and will erect a plant. The property is 400 × 650 ft. The company has been for several years situated on South Senate Ave.

The Sullivan-Geiger Co., manufacturers of tin and sheet metal goods, Indianapolis, has purchased a site at Madison Ave. and Henry St. for a 3-story factory and warehouses. The company's present plant is on East South St.

GRAND RAPIDS, MICH.—The Grand Rapids Ry. Co. is considering plans for the erection of a car house between Front and Court Sts., to cost about $80,000.

DETROIT, MICH.—Baxter & O'Dell, 1024 Hammond Bldg., are preparing plans and specifications for a 1-story factory for the Brisco Mfg. Co., corner Baltimore and Woodward Aves. Frank Brisco is Pres.

The Lozier Motor Co., of New York, is to build a $1,000,000 plant in Detroit, it is stated. An option has been secured on 21 acres of ground in the center of the automobile manufacturing section of Detroit, and the plans for reinforced-concrete buildings, with a floor space of 200,000 sq. ft., are being prepared, and it is believed that the plant will be in operation by next fall, as much of the machinery had already been ordered.

B. C. Wetzel & Co., Archs., 404 Hammond Bldg., are preparing plans and specifications for a 2-story factory, 53 × 106 ft., for the Detroit Granite Co., Tenth and Fort Sts.

MURPHYSBORO, ILL.—The Murphysboro & Southern Illinois Ry. Co. expects to place contracts during the next month for the erection of a car house to have a capacity of ten cars. C. H. Clay is Gen. Mgr.

CHICAGO, ILL.—Rieder & Wood, Archs., Great Northern Bldg., are preparing plans for foundry building to be erected on Indiana and Kingsbury Sts., for the Tarrant Foundry Co.

CHAMPAIGN, ILL.—E. M. Burr & Co. will construct an addition to their plant soon. FREEMAN & BROOKS have been awarded the contract, to begin work on extending the main brick building, two stories in height, through to Fremont St. This will make the main building extend the width of the entire block from Hickory St. to Fremont St. The new part will be equipped with additional machinery, an elevator will be installed and this section used for the rebuilding and repairing of automobiles. The foundry building, which begins on Fremont St., is to be extended to Hickory St., making this building also the length of the block. A storehouse, two stories in height and to cover ground space, 20 × 40 ft., is to be erected. This will be used to store patterns, etc. A fireproof oil house is to be erected, and a concrete roof is to be built over the core oven.

RACINE, WIS.—The Racine Foundry Co., of Racine, Wis., has been organized with a capital stock of $40,000, to manufacture automobile and motor cycles cylinders. The company will erect a foundry and machine shop, plans for both buildings being in preparation. It is in the market for all kinds of foundry equipment, machine tools and shop supplies. R. R. Birdsall is Pres.

BELOIT, WIS.—The Gardner Machine Co., of Beloit, Wis., will build a plant of greatly increased capacity in the spring. The ground has been purchased and plans for the buildings are in course of preparation. The company will need machine tools.

GRINNELL, IOWA.—The Spaulding Mfg. Co. contemplates an addition, 60 × 100 ft., to be used in the production of automobile parts.

SIOUX FALLS, S. DAK.—The Dakota Portland Cement Co. proposes to build a cement plant in the spring, to have an annual capacity of 1,000,000 bbls. Plans are being prepared by the Osborn Engineering Co., Osborn Bldg., Cleveland, Ohio, and will be completed in about 60 days. D. B. Zimmer, Union Trust Bldg., Sioux Falls, is Pres.

JONESBORO, ARK.—The Mill Shoals Cooperage Co., of Mill Shoals, Ill., contemplates erecting a slack-barrel stave factory here. Estimated cost, $35,000.

ALAMEDA, CAL.—The Worden-Meeker Co. is preparing to erect a 2-story reinforced-concrete building on Blanding Ave., between Park and Oak Sts. It is estimated that the structure will cost about $150,000. The company is to use the building as an addition to its present paint manufacturing plant.

WINNIPEG, MAN.—See item under Streets and Roads.

VANCOUVER, B. C.—The Vulcan Iron Works has purchased 20 acres on Notre Dame Ave. and will erect blacksmith shop to cost $30,000.

GUADALAJARA, MEXICO.—Reconstruction is planned by the Atemajae Cotton Mills, which were destroyed by fire some time ago, at a loss of $1,000,000. A fireproof structure will be erected. English manufacturers have been asked for bids on 500 looms and other equipment.

MISCELLANEOUS CONTRACTS.

(denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

ROAD OILER.—New Haven, Conn.—See item under Streets and Roads.

DREDGING.—Wilmington, Del.—Bids will be received by Maj. R. R. Raymond, Corps Engrs., U. S. A., until March 18, for dredging Mispillion and Appoquinimink Rivers, Del.

DREDGING.—Brunswick, Ga.—Bids will be received until March 21 by Col. Dan C. Kingman, Corps Engrs., U. S. A., Savannah, for dredging refractory material in Brunswick Harbor, Ga.

LEVEE.—Woodson, Ark.—Contract for nine miles of levee, eight culverts, flood gate, etc. Bids opened on Feb. 9, has been awarded to F. H. PETERS & C. E. ADAMS, Ft. Worth, Tex., at 16.1 cts. per cu. yd.

BULKHEAD.—Long Beach, Cal.—The West Beach Improvement Association proposes to construct a bulkhead on the West Beach, to cost about $100,000. Plans are being prepared by E. P. Dewey, City Engr.

AIR COMPRESSOR OUTFIT.—New York, N. Y.—Bids are asked until 2 p. m., March 3, by Kingsley L. Martin, Bridge Comr., for furnishing and delivering one portable motor driven air compressor outfit to the Williamsburg Bridge.

DREDGING.—South March, Ont.—Bids will be received until March 1, by Thomas Richardson, Clk., Township of March, at South March, for dredging work on Carp River, within the townships of March and Huntley, County of Carleton.

WAGONS.—Washington Barracks (Washington post-office), D. C.—Bids are asked until noon March 5, by Lieut. Col. W. C. Langfitt, Corps Engrs., U. S. A., for furnishing four tool wagons, 35 chest wagons and 20 pontoon wagons.

QUICK LIME.—New York, N. Y.—Bids are asked by Alfred E. Steers, Pres. Boro. of Brooklyn, until 11 a. m., March 2, for furnishing, delivering, housing and trimming 7,000 bbls. of quick lime at the several sewage disposal works.

ENLARGING DITCH.—Sioux City, Iowa.—Bids will be received until March 2, by E. E. Hosmer, County Auditor, for enlarging lateral "G" of the Farmers' Ditch; lateral is about 4¾ miles in length and the amount of excavation is about 16,000 yds.

FORGINGS, BOLTS, ETC.—Wheeling, W. Va.—Bids will be received by Capt. F. W. Alstaetter, Corps Engrs., U. S. A., Wheeling, until Feb. 28, for furnishing and delivering structural steel, steel forgings, bolts, etc., for dams Nos. 8 and 11, Ohio River.

RIPRAP.—Fort Wetherill, R. I.—Bids will be received by First-Lieut. Frank H. Phipps, Jr., Commissioner Q. M., U. S. A., Fort Adams, R. I., until 10 a. m., March 7, for construction of riprap fill, railway, and grading at the wharf at Fort Wetherill, R. I.

DITCH.—Grant Park, Ill.—Bids will be received until March 3, by the Drainage Commissioners of Exaline Creek, Union District No. 2, towns of Sumner and Hill, at the office of Emery L. Jarvis, Clk., Grant Park, for enlarging and grading a ditch about six miles in length.

DITCHES.—Harvel, Ill.—Bids will be received until March 1, by the Commissioners of Union Drainage District, No. 2, towns of Harvel and Kings, counties of Montgomery and Christian, at Harvel, for cleaning out and reconstructing open ditches, estimated to contain 49,886 cu. yds. J. W. Dappert is Engr., Taylorville.

DRAINAGE.—Webster City, Iowa.—Bids will be received by the County Auditor until March 3, for work in drainage districts as follows: Fardal Drainage District, cost $10,000; Russell, $5,000; Kean, $16,000, and Whistler, $20,000. The Whistler ditch will have about three miles of open ditch work and three miles of tile.

DITCH.—Newark, Ill.—Bids will be received until March 3, by the Drainage Commissioners of the Big Slough Drainage District in Kendall and Grundy counties, Samuel Naden, Chn., at the office of Carl Barnard, in the village of Newark, for constructing certain open drainage ditch about five miles in length, with an excavation of about 56,730 cu. yds. of earth.

LIGHT VESSEL.—Washington, D. C.—Bids were received on Feb. 9, by the Lighthouse Board, Washington, for furnishing material and labor necessary for the construction, equipment and delivery of the single screw, wood, steam, lighthouse tender "Woodbine" from Waters-Colver Co., West New Brighton, N. Y.; Racine Boat Mfg. Co., Muskegon, Mich.; John H. Dialogue & Son, Camden, N. J.

BARGE CANAL.—Albany, N. Y.—One bid was received on Feb. 16, by F. C. Stevens, Supt. Public Works, for Barge Canal contract 49, constructing about six miles of canal between a point 500 ft. east of Yellow Mills bridge and the Wayne-Munroe county line. BELLEW & MERRITT CO., Tuckahoe, N. Y., $750,279 (awarded contract); engineer's estimate, $765,679. Itemized prices are given under contract prices.

GUARD GATE SUPERSTRUCTURES.—Albany, N. Y.—Bids were received as follows on Feb. 16, by F. C. Stevens, Supt. of Public Works, for constructing guard gate superstructure on the improved Erie Canal near Spencerport, Brockport, and Middleton. Contract 75: Engineer's estimate, $39,525; Massillon Bridge Construction Co., Massillon, Ohio, $43,025; Whitehead & Kales Iron works, Detroit Mich., $43,368. Receivers for J. B. & J. M. CORNELL CO., 26th St. and Eleventh Ave., New York, awarded contract.

BARGE CANAL.—Albany, N. Y.—Bids are asked by F. C. Stevens, Supt. Public Works, until noon, March 29, on four additional barge canal contracts, as follows: Contract No. 21, for excavating the canal prism and constructing guard lock, highway bridge abutments and all appertaining work between the Genesee River and the east end of Contract No. 6, in Monroe County, a distance of 2.43 miles; engineer's estimate, $1,475,900. Contract No. 39, for dredging a channel in the Oswego River and performing work incidental thereto, between Three Rivers and Fulton, Oswego County, a distance of 10.84 miles; engineer's estimate, $972,900. Contract No. 73, for dredging a channel in the Hudson River and performing work incidental thereto from Northumberland to Stillwater, a distance of 15 miles; engineer's estimate, $648,360. Contract No. 78, for the construction of a dike along the Oswego River in the vicinity of Fulton, Oswego County, about 1.23 miles long; engineer's estimate, $55,154. Frank M. Williams is State Engr.

CONTRACT PRICES.

(denotes that this work is advertised in Engineering News.)*

SEWERS AND PAVING.—A. K. Hubbard, City Engr., Alva, Okla., has recently awarded the contract for sewer and paving work amounting to $50,457.20. to G. A. HEMAN, Chickashaw, Okla. The unit prices are as follows: 9,050 cu. yds. excavation, 23 cts.; 15,230 sq. yds. sheet asphalt paving, trinidad, $2.09; 10,800 lin. ft. concrete curb and gutter, straight, 68 cts.; 510 lin. ft. concrete curb and gutter, radius 6 ft., 90 cts.; 48 catch basins, $35; 12 manholes, $38; 1,780 lin. ft. oak headers, 15 cts. For furnishing and laying vitrified sewer pipe, including excavating and back fill, the prices per ft. were as follows: 710 ft. 10-in., 50 cts.; 1,040 ft. 12-in., 70 cts.; 840 ft. 15-in., 90 cts.; 840 ft. 18-in., $1.10; 720 ft. 21-in., $1.35; 920 ft. 24-in., $1.65.

PAVING AND CURBING.—Bids were received by the Comrs of Highways, Harrisburg, Pa., for paving and curbing several streets. The contractors were (A) Central Construction & Paving Co.; (B) Barber Asphalt Paving Co.; (C) Warner-Quinland Asphalt Co.; (D) Stucker Bros.' Construction Co. The unit prices for the different streets were as follows:

	A	B	C	D
240 sq. yds. paving	$1.56	$1.58	$1.64	$1.90
1,200 lin. ft. curbing	.74	.78	.79	.98
470 sq. yds. paving	1.68	1.58	1.67	1.84
1,000 lin. ft. curbing	.47	.46	.54	.58
5,500 sq. yds. paving	1.68	1.58	1.64	1.73
4,000 lin. ft. curbing	.47	.78	.79	.84
2,888 sq. yds. paving	1.52	1.58	1.69	1.90
1,130 lin. ft. curbing	.74	.78	.79	.78
1,030 sq. yds. paving	1.66	1.58	.1.67	1.90
1,460 lin. ft. curbing	.47	.46	.54	.74

BARGE CANAL.—Albany, N. Y.—One bid was received by F. C. Stevens, Supt. Public Works, on Feb. 16, for Barge Canal Contract No. 49, for the construction of about six miles of canal between a point 500 ft. east of Yellow Mill's bridge and the Wayne-Monroe County line. The items (A) Engineer's estimate; (B) Bellew & Merritt Co., Tuckahoe, N. Y., are as follows:

	A	B
220 acres clearing	$25.00	$29.00
1,543,600 cu. yds. excavation	.21	.23
260 M. ft. B. M. sheeting and bracing	50.00	50.00
30,200 cu. yds. forming embankment	.15	.15
3,130 cu. yds. lining	1.50	1.50
20 M. ft. B. M. sawed lumber (yellow pine or Douglas fir)	55.00	55.00
11 M. ft. B. M. sawed lumber (hemlock)	40.00	40.00
4 M. ft. B. M. white oak	100.00	100.00
11 M. ft. B. M. sawed lumber in needles (yellow pine)	100.00	100.00
18,400 lin. ft. foundation piles, 10 to 30 ft. long	.25	.25
400 lin. ft. mooring piles, 20 ft. long	.30	.30
1,420 M. ft. B. M. wooden sheet piling	50.00	47.00
31,250 cu. yds. second-class concrete	6.00	5.60
250 cu. yds. reinforced concrete	12.00	12.00
7.5 cu. yds. first-class masonry bridge coping	30.00	30.00
29,100 cu. yds. wash wall	2.00	1.90
1,440 sq. yds. first-class stone paving	2.50	1.75
680 sq. yds. second-class stone paving	1.50	1.50
320 sq. yds. cobblestone paving	1.00	1.00
480,100 lbs. structural steel	.05	.045
28,400 lbs. metal reinforcement	.035	.035
16,000 lbs. steel castings	.045	.045
500 lbs. iron castings, plain	.035	.035
9,000 lbs. iron castings, machined	.05	.05
170 sq. yds. wooden pavement, 3¾-in. thick	3.00	3.00
960 sq. yds. wooden pavement, 2¾-in. thick	2.75	2.75
3,425 lin. ft. wooden fence	.20	.23
3 sluce gates, with machinery complete in place	700.00	700.00
82 lin. ft. lattice railing	1.75	1.75
206,000 lbs. metal in lock gates	.055	.055
86,000 lbs. metal in buffer beams	.06	.06
34,000 lbs. metal in lock valves	.09	.09
Removing old bridge superstructures, lump sum	200.00	200.00
Maintaining highway traffic, lump sum	2,500.00	2,000.00
Maintaining navigation, lump sum	2,000.00	1,500.00
Coffer-dams, pumping, bailing and draining, lump sum	8,000.00	6,000.00
Removing and replacing Frears bridge superstructure, lump sum	100.00	100.00
Totals	$765,679	$750,279

GUARD GATES.—Albany, N. Y.—The itemized prices of the bids received Feb. 16 by F. C. Stevens, Supt. Public Works, for constructing of guard gate superstructures on the Erie canal near Spencerport, Brockport, and Middleport, known as Contract No. 75, were: (A) Engineer's estimate; (B) Massillon Bridge Construction Co., Massillon, Ohio; (C) Whitehead & Kales Iron Works, Detroit, Mich.; (D) RECEIVERS FOR J. B. & J. M. CORNELL CO., 26th St. and 11th Ave., New York (awarded contract):

	A	B	C	D
700,000 lbs. metal in guard gates	$0.05½	$0.06	$0.0607	$0.0597
97 cu. yds. second-class concrete	10.00	10.00	8.50	11.00
1 M. ft. B. M. sawed lumber	55.00	55.00	54.00	60.00
Totals	$39,525	$43,025	$43,368	$42,917

*HIGHWAYS.—New York State.—Bids were received Feb. 14. 16 and 18 for the improvement of about 182 miles of highways. The detailed bids and awards are given in another part of this issue. The location, length, amount of the contract, as awarded, and the cost per mile are given in the table following:

Road No.	Name and County.	Length, miles.	Total cost.	Cost per mile.
323	Reservation-Ovid—Seneca	3.66	$41,247	$11,269
350	Highland-Gardner—Ulster	3.76	76,990	20,473
397	Canajoharie-Flat Creek—Montgomery	6.67	53,454	11,013
548	Berry Hill—Nassau	7.59	55,498	7,360
565	Watertown-Theresa—Jefferson	7.35	81,850	11,136
583	Couse-Luther—Rensselaer	3.40	37,154	10,928
610	Mechanicville-Maltar—Saratoga	7.42	87,308	11,772
624	Carthage-Utica—Jefferson	3.09	35,185	11,445
631	Eagle Mills-Clums Corners—Rensselaer	2.25	23,076	10,021
637	Manchester-Victor—Ontario	5.30	48,517	9,532
638	Geneva—Ontario	1.02	10,746	10,053
724	Greenwich-Battenville—Washington	3.98	46,029	11,565
728	State Line-Orangeburg—Rockland	2.82	32,100	11,382
735	Potsdam-Colton—St. Lawrence	7.90	91,000	11,518
762	Craryville-State Line—Columbia	6.02	71,487	11,874
775	Golden's Bridge-Croton Falls—Westchester	4.42	41,537	9,398
776	West Plattsburg—Clinton	7.26	68,356	9,415
797	Hunter-Windham—Green	3.39	39,543	11,664
798	Kent-Towner—Putnam	2.78	40,990	14,744
804	Luzerne-Lake George—Warren	7.13	73,604	10,322
820	Hogansburg-Bombay—Franklin	6.52	50,102	7,700
821	Saranac Lake-Blookingdale—Essex	5.58	59,427	10,650
841	Crown Point—Port Henry—Essex	4	56,972	14,243
842	Waterford—Saratoga	0.27	3,294	12,200
5,000	Saugerties-Kingston—Ulster	2.32	24,685	10,640
5,001	Lloyd-Town Line—Ulster	1.57	18,998	12,102
5,002	Congers-Long Cove—Rockland	1.61	17,489	10,863
5,004	Blue Stone-Livingston—Columbia	2.05	30,600	14,927
5,009	Pauling Village—Dutchess	1.50	20,874	13,916
5,010	Singerlands—New Scotland—Albany	2	22,400	11,200
5,012	Fleming-Auburn—Cayuga	2.75	35,040	12,742
5,014	Chittenango-Oneida—Madison	3.15	43,300	13,746
5,016	Carmellus-Fairmount—Onondaga	3.09	39,000	12,621
5,017	Clyde-Savanna—Wayne	3	37,033	12,344
5,018	Reading-Dundes—Yates	2	26,059	13,030
5,019	Lake Shops—Lackawanna City—Erie	1.89	36,163	19,135
5,020	East Pembroke-Pembroke—Genesee	3.46	39,774	11,495
5,021	LeRoy-Caledonia-Mumford—Livingston	3.98	45,830	11,574
5,022	Binghamton-Windsor—Broome	3	41,890	13,963
5,024	LeRoy-Warsaw—Wyoming	2.67	33,000	12,397
5,025	Albion-Holley—Orleans	2.46	24,000	9,756
5,026	Corning-Painted Post—Steuben	3.56	48,500	13,626
5,027	Catskill-Saugerties—Green	2	27,000	13,500
5,028	East Creek-St. Johnsville—Montgomery	3.73	62,980	11,013
5,029	Schodack Center-Valatie—Rensselaer	2	41,000	20,500
5,030	Scotia-Wyatt's—Schenectady	2.25	20,862	9,272
5,031	Malone-Moira—Franklin	2	16,872	8,436
5,032	Potsdam-Canton—St. Laurence	5	54,961	10,992
5,033	Salem-Granville—Washington	2.96	28,300	9,561
5,034	Oneida Castle-Vernon—Oneida	1.50	16,632	11,088
5,035	Monticello-Liberty—Sullivan	2.50	32,989	13,195

SEWERS.—Salt Lake City, Utah.—Bids were received Feb. 4 by the Board Public Works, H. G. McMillan, Chn., for constructing pipe sewers in sewer extensions Nos. 220, 249, 253 and 254, (A) JAMES KENNEDY CONSTRUCTION CO. (contract awarded). The detailed bids are as follows:

Sewer Extension No. 320.	A
50,632.96 cu. yds. excavation back filling	$1.45
276 lin. ft. vit. pipe, 6-in.	0.25
32,234.7 lin. ft vit. pipe, 8-in.	0.48
22,545 lin. ft. vit. pipe, 10-in.	0.65
9,564 lin. ft. vit. pipe, 12-in.	0.80
2,481 lin. ft. vit. pipe, 15-in.	1.20
160 manholes, each	70.00
61 flush tanks, each	145.00
Unit cost per front ft. of abutting property:	
Full rate	2.26
Half rate	1.13
Total	$134,287

Sewer Extension No. 249.	A
10,938 cu. yds. excavation and back filling	$1.40
9,562 lin. ft. vit. pipe, 10-in.	0.60
9,685 lin. ft. vit. pipe., 12-in.	0.75
52 manholes, each	60.00
17 flush tanks, each	135.00
Unit Cost per front ft. of abutting property:	
Full rate	1.99
Half rate	0.99
Total	$33,730

EXAMINATIONS.

CONSTRUCTING CONCRETE ENGINEER. Rock Island, Ill.—The U. S. Civil Service Commission invites attention to the fact that the examination announced to be held on March 7 for Constructing Concrete Engineer, $2,000 a year (for employment in connection with the erection of a new artillery storehouse at the Rock Island (Illinois) Arsenal, has been canceled, as the position has been filled. Noted last week.

INDUSTRIAL NOTES.

THE FON DU LAC PRESS BRICK CO., Fon du Lac, Wis., is contemplating doubling its present capacity. It will purchase necessary machinery the coming spring.

THE ROCKLAND LAKE TRAP CO., New York City, will make extensive improvements in connection with its crushing plant on the Hudson River, and expects to materially increase its output.

THE TOTAL DOMESTIC COMMERCE on the great lakes in 1909 amounted to 80,974,605 tons of freight. This is an increase of 33⅓% compared with 1908, but a falling off of about 3% compared with 1907.

A NEW FURNACE of the Jones & Loughlin Steel Co. was blown in Feb. 14. This furnace which is second of four of like capacity to have an output of 500 tons daily. Another one will be blown March 15, and the last April 15.

THE HARRISON ENGINEERING CO., New York City, manufacturers of the Harrison Aertube heater, has just opened another branch office, Real Estate Trust Bldg., Broad and Chestnut Sts., Philadelphia. Mr. J. J. McKee is manager.

MERRITT & CO., Camden, N. J., have engaged Mr. Gerald Priestman as manager of sales for their department of hydraulic specialties. Mr. Priestman was formerly associated with Pugh & Hubbard, consulting engineers, Philadelphia.

THE L. J. WING MFG. CO., 90 West St., New York, makers of fans and blowers, has opened a branch office, 1785 Old Colony Bldg., Chicago. A stock of blowers will be carried in that city. The office will be in charge of Mr. J. J. Arnsfield, Western Mgr.

THE WILLIAMSPORT GAS ENGINE WORKS, Williamsport, Pa., have reopened the plant of the Williamsport Gas Engine Co. shut down during the last year. They will continue the entire line of gas and gasoline engines formerly manufactured by the old company.

FUEL OIL IS TO BE USED on the British war vessels, according to press dispatches. On the heels of this announcement is the statement that interests identified with the Southern Pacific Railroad have purchased 600,000 acres of oil lands in Mexico at a price of $1,250,000.

THE M. P. McGRATH CONTRACTING CO. has recently been incorporated with a capital stock of $125,000. The same class of work will be carried on as heretofore—railroad construction, and especially concrete work. M. P. McGrath is President and J. F. Mooney, Secretary and Treasurer.

THE MEDUSA WATERPROOF COMPOUND made by the Sandusky Portland Cement Co., Sandusky, Ohio, has recently been used in the Naval Y. M. C. A. basement and swimming pool, Norfolk, Va., and in the swimming pool of the University of Minnesota, Minneapolis, Minn.

THE GRANITE STRIKE, which has been in force for nearly ten weeks, in Vermont, has been settled. The largest branch of cutters have signed the agreement offered by the manufacturers. Under new schedule an increase of wage averaging from 2 to 2½ cts. an hour is provided for.

THE CYCLONE DRILL CO., Orrville, Ohio, has opened a New York office, 1456 Hudson Terminal Bldg., in charge of Mr. C. H. McCarthy. The company manufactures a line of well drilling machines, prospecting outfits, sounding and boring apparatus, blast hole drills and blast hole loaders, vertical engines and boilers and gasoline outfits.

DOUGHERTY & BACHRAN, 501 North American Building, Philadelphia, Pa., recently embarked in the business of furnishing and erecting steam piping for power houses. They have secured the contract for installing the necessary piping on the low-

pressure [illegible] lines, and two large trunk lines for the [illegible]win Locomotive Works of that city.

DODG[illegible] DAY, ENGINEERS, PHILADELPHI[illegible]ave been engaged to advise regarding [illegible] location and character of a large a[illegible] to the plant of the H. H. Frankl[illegible] Co., Syracuse, N. Y. Later they wi[illegible]e a complete industrial study of the ma[illegible]uring problems of the company for th[illegible]pose of preparing a layout to cover t[illegible]mplete development of the Syracuse pr[illegible].

INDU[illegible]L RAILROAD EQUIPMENT is exhibit[illegible] a novel way by the Ernst Wiener [illegible]50 Church St., New York. This compa[illegible]ich markets a complete line of railroa[illegible]uipment, has placed a 1,500-lb. locomot[illegible] a side dump car and a flat car on a [illegible]ble track in a conspicuous part of the [illegible]son Terminal. The equipment is on a [illegible]row gage track, complete, with switch[illegible]nd turntable.

HIGH [illegible]EED TOOL STEEL will be made by the [illegible]tric Steel Co., New York, which is now [illegible]ilding a plant in New Milford, Conn. [illegible]is Auriccho is the inventor of the new pr[illegible]ses. Crucible furnaces will be installed, [illegible]d the company will be in position to mak[illegible]eliveries about April 1. This steel has be[illegible] made in experimental furnaces, and th[illegible] who have used it have expressed themsel[illegible] as satisfied with the results obtained.

THE [illegible]AILWAY SUPPLY MANUFACTURERS' A[illegible]SOCIATION will hold its annual convention at Atlantic City, June 15 to 22. At a me[illegible]ting of the executive committee held in Pittsburg last week nearly all the floor space was alloted to manufacturers; in fact, less than 4,000 ft. of space for exhibition purposes remains available. Jas. D. Conway, 313 Sixth Ave., Pittsburg, formerly connected with the Pittsburg & Lake Erie R. R., is now Secretary of the Association.

RAILROAD EQUIPMENT ORDERS for large amounts have been given out recently. The Baltimore & Ohio last week authorized the expenditure of an additional $3,000,000 for equipment. Deliveries are now being made on the $13,000,000 order given some time ago. The order recently given include 30 Mallet locomotives and 120 consolidated freight locomotives weighing 227,000 lbs. The St. Paul has authorized the building of 25 switching locomotives in its own shops. The Ontario & Western is in the market for 6 locomotives and the New Haven for 10. Among car orders are the following: 300 gondolas for the Ontario & Western, placed with the American Car & Foundry Co.; 400 for the Rock Island, placed with the Rodger Ballast Car Co.; 2,000 for the Boston & Maine, placed with the Laconia Car Co.; 100 for the Swift Refrigerator Transportation Co., placed with the Haskell & Barker Car Co. The Missouri, Kansas & Texas is in the market for 2,150 cars, the National Railways of Mexico for 600 and the Denver, Laramie & Northwestern for 150.

MacARTHUR BROTHERS CO., 11 Pine St., New York, has recently increased its capital stock. The preferred, which was $1,000,000, is now $3,000,000, but the common is unchanged at $2,000,000, although this may be increased to $3,000,000. In the marketing of this stock some interesting facts are given regarding the business of this concern. The birth of the firm was coincident with the beginnings of large public works in this country, and the history of the MacArthur business is interwoven with and told by the public works, developments and improvements of the past century. The business of the company has, it is believed, as stated in the prospectus, been established and been in constant and successful succession longer than any other business of its kind in the United States. The present corporation is successor to the contracting business started by Mr. John R. MacArthur in 1826. Since his day it has been owned and controlled by his sons and grandsons and their associates. Until 1893, the business was conducted as a copartnership under the name "MacArthur Bros." In 1893 it was incorporated in Illinois; and subsequently in 1903 the present company, MacArthur Brothers Co. was incorporated under the laws of the State of New Jersey. During these eighty-four years of its history, the business has continued unbroken; has successfully passed through times of wars, panics, depressions and strikes; has never failed to complete any work it has ever undertaken, and never failed to carry out its full obligations. Among the great enterprises carried entirely or in part by this firm may be mentioned the following: Much of the Erie Canal for the State of New York; many locks and dams in the various states and for the United States Government; several sections of the Chicago Drainage Canal; World's Fair Grounds, Chicago, 1892-3, and several of the largest buildings; water power canal—Sault Ste. Marie, Michigan; Wachusetts Dam for the city of Boston; West Neebish Channel, Sault Ste. Marie River. Also many thousands of miles of railroads comprised in the principal trunk lines of the United States and Canada, such as: Atchison, Topeka & Santa Fe R. R.; Baltimore & Ohio R. R.; Chicago & Erie Railroad; Cleveland, Cincinnati, Chicago & St. Louis R. R.; Chicago, Burlington & Quincy R. R.; Chicago & Alton Railroad, Deepwater Railway and numerous others. In 1907, upon the invitation of the United States Government the company formed and headed a group of four of the leading contracting and engineering concerns of the country, and offered to the Government to complete the Panama Canal within a fixed time. The bid was favorably considered, but it was finally determined to continue the work by Government forces.

The company has done $33,164,203.73 of contracting work in the last six years, including the two of industrial depression, and now has contracts for $22,360,000. As a dividend payer the company has an enviable reputation, and according to the report has a larger surplus than several important industrial companies whose stocks are selling much higher.

LIST OF CONTRACTS PENDING.

Light, Heat and Power Plants.

		Noted in issue of
2-26	Transformers, etc., London, Ont.	2-17
2-26	Generators, etc., Speigner, Ala.	2-24
2-26	Power plant, Millville, W. Va.	2-24
2-28	Electric fixtures, Cincinnati, O.	2-17
3- 1*	Gas mains, Bristol, Conn.	2-10
3- 8	Cable, Toronto, Ont.	2-17
3- 9*	Power-house, Wheeling, W. Va.	2-10
3-15	Franchise, Sierra Madre, Cal.	2-17
3-15	Electric fixtures, Green Bay, Wis.	2-17

Bridges.

2-25	Bridges, Rockford, Ill.	2-24
2-26	Viaduct work, Buffalo, N. Y.	2-24
2-26	Piers, Grand Junction, Colo.	2-17
2-26	Bridge work, Peoria, Ill.	2-24
2-28	Superstructure, Shediac, N. B.	2-17
2-28	Piers, etc., Chapeau, Que.	2-17
2-28	Culverts, Lisbon, Ohio	2-17
2-28*	Swing span, Snohomish, Wash.	2- 3
3- 1	Bridge, etc., Vancouver, Wash.	2- 3
3- 1*	Bridge work, Chattanooga, Tenn.	2-10
3- 2	Bridge work, Cleveland, Ohio	2-17
3- 3	Bridge, Wyomissing, Pa.	2-17
3- 3	Mridge, Xenia, Ohio	2-24
3- 3	Bridge lumber, New York	2-24
3- 3	Footbridge, New York	2-24
3- 3	Bridge, Caledonia, N. Y.	2-24
3- 7	Bridge extension, Topeka, Kan.	2-10
3- 7	Bridges, Bradentown, Fla.	2-10
3- 7	Bridge, Sylva, N. C.	2-10
3- 7	Raising span, etc., Oxford, N. C.	2- 3
3- 7	Bridge, Winnipeg, Man.	2-24
3- 7	Bridges, Leavenworth, Kan.	2-24
3- 7	Bridge, Derby, Ind.	2-24
3- 9*	Bridge, Ann Arbor, Mich.	2-17
3-11	Bridge work, Cincinnati, Ohio	2-17
3-11	Bridge, Cincinnati, Ohio	2-24
3-11	Bridge, Hutchinson, Kan.	2-24
3-12	Bridges, Edmonton, Alta.	2-17
3-14	Bridge, Savannah, Ga.	2- 3
3-16*	Substructure, etc., St. Joseph, Mich.	2-17
4- 5	Bridge, Castlerock, Wash.	2-24

Buildings.

2-25*	Post-office, Goldsboro, N. C.	1-27
2-25	Bank, Akron, Ohio	2-24
2-25	Building, Fargo, N. Dak.	2-24
2-26*	Store house, Ft. Wood, N. Y.	2- 3
2-28	Building, Crookston, Minn.	2-10
2-28	Building, Garden City, L. I (Mfg. Pl.)	2-24
3- 1	Court-house, Auburn, Ind.	2-24
3- 1*	Barracks, Ft. Douglas, Utah	2- 3
3- 1	Post-office, Hot Springs, Ark.	1- 6
3- 1	Stable; Norfolk, Va.	2-17
3- 1	Bonds, Ottawa, Ohio	2-17
3- 1	Parliament bldgs., Toronto, Ont.	2-17
3- 2	Post-office, Meridian, Miss.	1-20
3- 2*	B'ldings, Ft. D. A. Russell, Wyo.	2-10
3- 2	Ice plant, Ft. Sam Houston, Tex. (Mfg. Pl.)	2-10
3- 2	Building repairs, New York	2-24
3- 3*	Post-office, Lynchburg, Va.	1-27
3- 4	Post-office, Lead, S. Dak.	1-27
3- 5	Quarters, Ft. Robinson, Neb.	2-17
3- 7	Stable, Ft. Mackenzie, Wyo.	2-10
3- 7	Schools, Columbus, Ohio	2-17
3- 7*	Buildings, Ft. Yellowstone, Wyo.	2-17
3- 7	School, Lawton, Okla.	2-24
3- 9	Post-office, Athens, Ga.	1-27
3-10	Painting, etc., Duluth, Minn.	2- 3
3-11	Post-office, Jackson, Tenn.	2-10
3-12	Wire rope mill, Boston, Mass. (Mfg. Pl.)	2-10
3-12	Storehouse, Mt. Dade, Fla.	2-24
3-14*	Post-office, Frankfort, Ky.	2- 3
3-15*	Post-office, Denver, Colo.	1-27
3-15	Buildings, Ft. Bayard, N. Mex.	2-17
3-15	Building, Indianapolis, Ind.	2-27
3-15	Quarters, etc., Ft. McKinley, Me.	2-24
3-16	Post-office, Danville, Va.	2- 3
3-17*	Post-office, Richmond, Va.	2-10
3-21	Post-office, Lincoln, Ill.	2-17
3-22*	Post-office, Fremont, Neb.	2- 3
3-23*	Post-office, Connersville, Ind.	2-17
3-24	Post-office, Sacramento, Cal.	2- 3
3-25	Post-office, Lexington, Ky.	2-17
3-28*	Post-office, Quincy, Ill.	2-17
3-29	Post-office, Estherville, Ia.	2-17
3-30*	Court-house, Butte, Mont.	2- 3
2-25	Bank bldg., Akron, Ohio	2-24

Water-Works.

2-25	Valves, etc., Calgary, Alta.	2-24
2-25	Cocks, Minneapolis, Minn.	2-24
2-26	Irrigation bonds, Lamar, Colo.	2-24
2-28	Reservoir, Wallington, N. J.	2-17
2-26	Well, Haswell, Colo.	2- 3
2-26	Well, Cortez, Colo.	2- 3
2-28	Water-works, Milford, Iowa	2- 3
2-28	Dam, etc., Dallas, Tex.	2- 3
3- 1	Laying pipe, Waterburg, Conn.	2-17
3- 2	Water mains, New York	2-17
3- 3	Gates, Baltis, S. Dak.	2-17
3- 7*	Chimney, Meadville, Pa.	2-17
3- 7*	Pump, St. Paul, Minn.	2-17
3- 7	Cisterns, Fort Morgan, Ala.	2-17
3- 7	Pump, Rock Island, Ill.	2-10
3- 7	Water-works, Midland, Tex.	2-24
3- 8	Sluice gates, etc., New York	2-24
3- 8*	Steel conduit, Portland, Ore.	2-17
3- 8	Boiler house, Ft. Riley, Kan.	2-17
3-14	Pumping engine, Phoenix, Ariz.	2-10
3-15	Water-works extension, Burlington, Wis.	2-17

Sewers.

2-25	Sewer, North Braddock, Pa.	2-24
2-25	Sewer, Vancouver Barracks, Wash.	2-10
2-28	Sewers, Long Island City, N. Y.	2-17
3- 1*	Sewers, Mount Sterling, Ky.	2-17
3- 2	Sewer plans, Vincennes, Ind.	2-17
3- 2	Sewer work, Alliance, Neb.	2-24
3- 3	Sewers, Cleveland, Ohio	2-24
3- 3	Sewers, Florence, S. C.	2-17
3- 3	Sewage pump station, El Paso, Tex.	2- 3
3- 4*	Sewer, Louisville, Ky.	2-17
3- 7*	Sewerage system, Fort Sill, Okla.	2-10
3- 7	Sewage pumping machinery, Orillia, Ont.	2-24
3-10	Sewers, Plymouth, Wis.	2-24
3-10	Sewers, Ludington, Mich.	2-24
3-10	Sewers, Richmond, Ind.	2-24
3-10	Sewers, Glen Osborne, Pa.	2-17
3-15	Sewers, Burlington, Wis.	2-17
3-16	Sewers, Madison, Fla.	2-24
4- 1	Sewer system, Cleveland, Tenn.	2-17
4- 4	Culverts, Ashley, N. Dak.	2-10

Streets and Roads.

		Noted in issue of
2-25	Asphalt, Winnipeg, Man.	2-17
2-25	Road, Cincinnati, Ohio	2-10
2-25*	Asphalt, Winnipeg, Man.	2-10
2-25	Paving, La Grange, Ill.	2-24
2-25	Paving, Des Moines, Ia.	2-24
2-26	Limestone, Bexley, Ohio	2-10
2-26	Paving, Lincoln, Neb.	2-17
2-28	Paving blocks, Gallitzin, Pa.	2-17
2-28	Road oiler, New Haven, Conn.	2-24
2-28	Paving, Pittsburg, Pa.	2-24
2-28	Asphalt, Columbus, Ohio	2-24
2-28	Paving, Wadsworth, Ohio	2-24
3- 1	Roads, Bowling Green, Ohio	2-24
3- 1	Paving, Manitowoc, Wis.	2-24
3- 1	Asphalt plant, Winnipeg, Man.	2-24
3- 1	Grading, Secaucus, N. J.	2-17
3- 1	Walks, Wash., D. C.	2-17
3- 1	Highways, Bowling Green, Ohio	2-10
3- 1	Driveways, etc., Moline, Ill.	1-13
3- 2	Macadam, Ft. Wayne, Ind.	2-24
3- 2	Paving, Ottawa, Kan.	2-24
3- 3	Paving, Oshkosh, Wis.	2 24
3- 3	Paving, Fairmont, Minn.	2-24
3- 3	Walks, etc., Ft. Hamilton, N. Y.	2-10
3- 4	Road, Cincinnati, Ohio	2-17
3- 4	Road, Toledo, Ohio	2-24
3- 5	Macadam, Ashland, Ohio	2-24
3- 5	Paving, Racine, Wis.	2-24
3- 7	Paving, Oklahoma City, Okla.	2-17
3- 7	Macadam, Hartford City, Ind.	2-24
3- 7	Stone road, Tipton, Ind.	2-24
3- 7	Road, Logansport, Ind.	2-24
3- 7	Pavement, etc., Omaha, Neb.	2-24
3- 7	Paving, Montgomery, Ala.	2-17
3- 7	Paving, Dothan, Ala.	2-10
3- 7	Roads, Oxford, N. C.	2- 3
3- 8	Paving, Pittsburg, Pa.	2-24
3- 8	Gravel road, Vincennes, Ind.	2-24
3- 8	Macadam, Paoli, Ind.	2-24
3- 8	Roads, Crawfordsville, Ind.	2-24
3- 8	Pavement, Waseca, Minn.	2-24
3- 9	Gravel road, Peru, Ind.	2-24
3-10	Paving, Plymouth, Wis.	2-24
3-10*	Sidewalks, Pensacola, Fla.	2-10
3-11	Gravel road, Brazil, Ind.	2-24
3-12	Paving, Orrville, Ohio	2-24
3-14	Paving, Caney, Kan.	2-17
3-15	Roads, Gordon, Ala.	1-18
3-15	Paving, Burlington, Wis.	2-24
3-17*	Paving, Corning, N. Y.	2-10
3-22	Walks, Canton, Ohio	2-24
3-30	Paving, Raleigh, N. C.	2-10

Miscellaneous.

2-25	Crane, Nashville, Tenn.	2-17
2-26*	Tile drains, Monticello, Ill.	2-10
2-28*	Incinerating plant (garbage), Lynchburg, Va.	1-27
2-28	Fence, gates, Winnipeg, Man.	1-27
2-28	Forgings, bolts, etc., Wheeling, W. Va.	2-24
3- 1	Ditch, Valparaiso, Ind.	2-10
3- 1	Ditch, Olivia, Minn.	2-10
3- 1	Ditch, Warren, Minn.	2-10
3- 1*	Fire hose, Wash., D. C.	2-10
3- 1*	Ditch, Warren, Minn.	2-10
3- 1	Dredging, South March, Ont.	2-17
3- 1	Dredging, South March, Ont.	2-24
3- 1	Ditches, Rarvel, Ill.	2-24
3- 2	Enlarging ditch, Sioux City, Iowa	2-24
3- 2	Quick lime, New York	2-24
3- 3	Ditch, Newark, Ill.	2-24
3- 3	Drainage, Webster City, Iowa	2-24
3- 3	Ditch, Grant Park, Ill.	2-24
3- 3	Air compressor outfit, New York	2-24
3- 5	Wagons, Washington Barracks, D. C.	2-24
3- 5*	Iron, steel, Dallas, Tex.	2- 3
3- 5	Piers, Charleston, S. C.	2- 3
3- 7	Ditches, Eldora, Iowa	1-27
3- 7	Ditch, Columbus, Ohio	2-17
3- 7	Macadam, Greenburg, Ind.	2-24
3- 7	Macadam, Columbus, Ind.	2-24
3- 7	Gravel road, Washington, Ind.	2-24
3- 7	Stone roads, paving, Marion, Ind.	2-24
3- 8	Gravel road, Wabash, Ind.	2-24
3- 8	Stone, New York	2-24
3- 8	Gravel roads, Fowler, Ind.	2-24
3- 9	Brick road, Muncie, Ind.	2-24
3- 9	Gravel road, Kokomo, Ind.	2-24
3- 7	Riprap, Fort Wetherill, R. I.	2-24
3- 8	Retaining wall, Bristol, Conn.	2-17
3- 9*	Dredging, Savannah, Ga.	2-17
3-10*	Ditch, Warrensburg, Mo.	2-10
3-12	Repairing launch, Jackson Barracks, La.	2-17
3-12*	Removing wrecks, Boston, Mass.	2-17
3-12	Macadam, Laporte, Ind.	2-24
3-14*	Cement, etc., Wash., D. C.	2-17
3-16	Moving stones, Portland, Me.	2-17
3-18	Dredging, Wilmington, Del.	2-24
3-21	Dredging, Brunswick, Ga.	2-24
3-29	Barge Canal, Albany, N. Y.	2-24
4- 1	Torpedo boats, Wash., D. C.	2- 3
4- 4	Culverts, Ashley, N. Dak.	2-10
4-30	Ditch, Olivia, Minn.	12-23

Examinations.

2-26	Topographic Draftsman, Albany.	2- 3
2-26	Franchise Examiner, Albany	2- 3
2-26	Junior Ry. Engr., Albany	2- 3
2-28	Transitman, New York	1-20
3- 3	Junior chemist, Wash., D. C.	1-27
3- 3	Technical Asst., Wash., D. C.	2-10
3- 9	Junior Animal Husbandman, Wash., D. C.	2-10
3- 9	Chemist, Wash., D. C.	2-10
3- 9	Topographic draftsmen, Wash., D. C	1-27
3-16	Plant Pathologist, Wash., D. C.	2-17
3-16	Laboratory Aid, Wash., D. C.	2-17
3-16	Cement Tester, Philippines	2-17
3-16	Assistant, Wash., D. C.	2-17
3-30	Scientific Asst., Wash., D. C.	2-10

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.	Work.	See issue.
2-26	Bridge work, Peoria, Ill. (S.)	2- 24
3- 5	Piers, Charleston, S. C. (S.)	2- 3
3- 8*	Conduit, Portland, Ore. (S.)	2-17
3-12	Wire rope mill, Boston, Mass. (S.)	2-10
3-18	Post-office, Rome, Ga.	2- 3

TRADE PUBLICATIONS.

IRON PROTECTIVE PAINT.—The Goheen Manufacturing Co., Canton, Ohio. Paper; 9½ × 8 ins.; pp. 16; illustrated.

A paint devised by this company for protecting iron and steel, and known as "Carbonizing Coating," is the subject of this pamphlet. The booklet consists largely of photographs of works on which the paint has been used.

CABLE GRIP.—Keays Cable Grip Co., 95 Liberty St., New York City. Paper; 5 × 7 ins.; pp. 8; illustrated.

A grip for use on industrial cable railways for mines, coal-handling plans, and general construction work, is described and illustrated in this booklet. It is claimed that this mechanism has a positive grip, but is free from the disadvantages of the screw, cam or toggle types. The grip on the cable is maintained by strong helical springs which automatically take up the wear in the cable and jaws.

DEEP WELL PUMPS.—The Keystone Driller Co., Beaver Falls, Pa. Catalog No. 6; paper; 8½ × 11 ins.; pp. 60; illustrated.

This company has taken over the business of the Downie Pump Co., and in this catalog describes the line of "Downie" deep-well pumps which it is now putting out. These include the double and single-stroke geared pumps, double and single-stroke steam pumps, windmill pumps, and various combinations of these. The catalogue shows the general features of design, and there are numerous tables of dimensions and capacities.

WATER-WELL DRILLERS.—Keystone Driller Co., Beaver Falls, Pa. Catlog No. 1, Edition 13. Paper; 8½ × 11 ins.; pp. 104; illustrated.

This catalog is in some ways a monograph on the general principles of drilling, as it takes up the processes of drilling, setting up the drilling machines, and the use of the different attachments. In addition, the special features of the Keystone apparatus are given, and the columns for their utility are stated. One part of the catalog is wholly a descriptive price list of complete apparatus and of parts for the same.

CONTROLLING DEVICES FOR ELEVATORS.—The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Paper; 5 × 8 ins.; pp. 128; illustrated.

These electric devices are for controlling the movements and speed of electrically operated passenger and freight elevators, and are designed for use with direct-current and alternating-current motors. The devices are of various types, adapted to different types of elevators. Direct-current adjustable-speed motors are considered preferable for passenger elevators (especially those operated at high speed), and induction motors are considered undesirable until a variable-speed alternating-current motor is developed. Each type of apparatus, with its several appliances, is described in detail, with information also as to its operation. Prices are given, and there are tables of information as to the wiring, sizes of wire and fuses, etc., for motors of different types and sizes.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56, of Advertisements and Construction News page 74.

PAVING.

OFFICE OF THE BOARD OF PUBLIC WORKS.

City of Mankato, Minn., Feb. 19, 1910.

Bids will be received by the Board of Public Works, in and for the corporation of the City of Mankato, Minn., for furnishing all material and labor and doing the work of paving with brick, Second Street, from Cherry Street to Jackson Street, and from Jackson Street to Plum Street; also for furnishing all material and labor for doing the work of paving Main Street, from Broad Street to the tracks of the C., M. & St. P. Ry. (excepting the intersections of Front of Main Street and Second of Main Street), all according to the plans and specifications on file in the office of Clerk of said Board. Total number of sq. yds., 21,045.

The bids for these improvements will be made on each street separately and shall be sealed bids directed to the Board of Public Works of City of Mankato, Minnesota, and shall be accompanied by a bond to the City of Mankato, Minnesota, in a sum not less than twenty (20) per cent. of the cost of the entire work for the price mentioned in the bid, and as

near as can be ascertained, executed for the bidder and two responsible sureties who shall be residents and freeholders of the State of Minnesota, or by a surety bond of like amount in some approved surety company, conditioned that he shall execute the work for the price mentioned in his bid, according to plans and specifications in case the contract should be awarded to him, and execute the contract and bonds within the time specified.

Bids will be received by the Board of Public Works of said City until 2.30 P. M., March 10th, 1910, at which time the bids will be publicly opened by said Board. The right is reserved to reject any or all bids.

Plans and specifications may be seen at the office of the Engineering News.

J. R. THOMPSON,
Pres. B. P. Works.

A. H. SELURER,
Clerk of Board and City Recorder.

STATE OF NEW YORK,
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS,
Albany, February 21, 1910.
NOTICE TO CONTRACTORS.

Sealed proposals will be received by the undersigned at his office in the Capitol in Albany, N. Y., until 12 o'clock noon of Tuesday, March 29, 1910, at which place and hour they will be publicly opened and read, for improving the New York State Canals, pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the amendments thereto, as follows:

1.
CONTRACT NO. 21.
Erie Canal—Section 9.

For excavating the canal prism and constructing guard lock, highway bridge abutments and all appertaining work between the Genesee River and the east end of Contract No. 6.

Length, 2.43 miles. Sheets 1 to 25 inclusive.

2.
CONTRACT NO. 39.
Oswego Canal—Section 1.

For dredging a channel in the Oswego River and performing work incidental thereto, between Three Rivers and Fulton.

Length, about 10.84 miles. Sheets 1 to 23 inclusive.

3.
CONTRACT N. 73.
Champlain Canal—Section 1.

For dredging a channel in the Hudson River and performing work incidental thereto from Northumberland to Stillwater.

Length, about 15.0 miles. Sheets 1 to 42 inclusive.

4.
CONTRACT NO. 78.
Oswego Canal—Section 1.

For the construction of a dike along the Oswego River in the vicinity of Fulton.

Length, 1.23 miles. Sheets 1 to 4 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or State bank in good credit within the State and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The amount of bond required for faithful performance will be ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

F. C. STEVENS,
Superintendent of Public Works.

CATSKILL AQUEDUCT.

CONTRACT 42.

Sealed bids will be received by the Board of Water Supply, in Room 910, 299 Broadway, New York, until 11 A. M. on March 8, 1910, for Contract 42, for furnishing and delivering eight 3-foot by 8-foot twin sluice-gates, eight 20-inch hand operated gate-valves, ten 60-inch gate-valves, with operating mechanisms, four 60-inch gate-valves with individual electric drive, four 60-inch gate-valves with gang drive, two 60-inch hydraulically operated gate-valves and appurtenances, and 3 lines of floor drive-shafting, for structures at Ashokan reservoir, near Brown's station, Ulster county, and at Croton Lake siphon, Westchester county, New York.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and pamphlets of contract drawings can be obtained at Room 906 at the above address by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars see Information for Bidders.

JOHN A. BENSEL,
President;
CHARLES N. CHADWICK,
CHARLES A. SHAW,
Commissioners of the Board of Water Supply.

LEVEE.

The Hefley Improvement District, of Milam County, Texas, is issuing $18,500.00 in bonds to defray cost of constructing a levee on Little River in the vicinity of Cameron. Bids are now being advertised for. Tennille Henderson is Engineer in Charge. Address Cameron, Texas.

GRAVEL ROADS.

Montgomery, Ala.

Bids will be received until twelve noon, March 21, for gravelling twelve miles of road and for grading and gravelling two miles of road.

For further information apply to

J. T. BULLEN,
County Engr.

MACADAMIZING.

Port Chester, N. Y.

Sealed proposals will be received by the Village Clerk at his office, Port Chester, N. Y., until 8 p. m., on the 7th day of March, 1910, for regulating, grading, macadamizing and otherwise improving Putnam Ave., from Willett Ave. to King St., in the Village of Port Chester, N. Y.

No proposal shall be considered unless accompanied by written consent of two sureties or a corporate surety duly authorized to carry on business in this State. Bids shall be accompanied by certified check payable to the order of the Village Treasurer for 5 per cent. of the amount bid.

The right is reserved to reject any and all bids. Further particulars, plans, specifications, etc., may be obtained on application to the Village Clerk.

The cost of the work is estimated at between $25,000 and $30,000.

(Signed) EDWARD V. BROPHY,
President.

THOMAS F. J. CONNOLLY,
Clerk.

Plans and specifications are on file at the office of Engineering News, New York City.

STEEL ROLLING DOORS.

New Orleans, La., Feb. 17th, 1910.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans at their office, 601-602 Hibernia Bank and Trust Co. Building, New Orleans, until March 15th, 1910, at 7.30 P. M., for furnishing and erecting steel rolling doors in certain steel sheds built on the river front, in the City of New Orleans.

Deposit: One Thousand ($1,000.00) Dollars, cash or certified check.

Payment: Eighty per cent. (80%) monthly.

Bond: In full amount of contract.

Plans, specifications and proposal forms are on file at the office of the Engineer, A. C. Bell, No. 606 Hibernia Bank and Trust Co. Building, New Orleans, by whom full sets will be furnished on deposit of Fifteen ($15.00) dollars, which said deposit will be refunded upon the safe return of the said set in good order.

The right is reserved to reject any or all bids.

HUGH McCLOSKEY,
President.

RETAINING WALL.

BOARD OF CONTROL.
Norfolk, Va., Feb. 21st, 1910.

Proposals will be opened at the Office of the Board of Control, Norfolk, Va., at 12 o'clock noon, on the 15th day of March, 1910, for the construction of a Bulkhead or Retaining Wall on both sides of "The Hague" in the said City.

Plans and drawings for same can be seen, and specifications with instructions to bidders had at the Office of the City Engineer.

Any bidder may submit an alternate bid, based on plans and specifications submitted therewith, but only under the conditions set forth in the "Instructions to Bidders."

The right to reject any or all bids is reserved.

THE BOARD OF CONTROL,
W. T. BROOKE,
City Engineer.

LOCK WORK.

Birmingham, Ala.

We desire to let a contract for the completion of the work on Lock 3, Tombigbee River, Ala., which work was originally let by the U. S. Government on Dec. 14, 1907. The total amount of the contract is $350,000 and the amount of work done to date is about $100,000. There remains 13,000 cubic yards of concrete to be placed on this lock; 20,000 cubic yards of stone filling; for crib dam, 1,000 cubic yards of gravel filling; 3,000 yards of rip rap, and 1,100,000 feet B. M. timber to be used in cribs, dams, etc.

For further particulars address FRANK NELSON, Birmingham, Ala., or P. H. O'BRIEN, Bessemer, Ala.

U. S. ENGINEER OFFICE, Wilmington, Del., Feb. 15, 1910.—Sealed proposals for dredging St. Jones and Murderkill Rivers, Del., will be received here until noon, March 18, 1910, and then publicly opened. Information on application. R. R. RAYMOND, Major, Engrs.

SEWERAGE.

Monticello, New York.

Sealed proposals will be received by the Board of Sewer Commissioners of the Village of Monticello until eight-thirty (8.30) P. M., March 17th, 1910, and then publically opened. For the construction of a portion of the system of sewers and a sewage disposal plant, according to the plans and specifications on file in the office of the Village Clerk.

Certified check for $5,000.00 to accompany bid.

Plans and specifications may be obtained upon request and a deposit of $5.

The right is reserved to reject any or all bids.

Board of Sewer Commissioners,
DR. RUSSEL W. ALLEN,
Secretary.

Plans and specifications are on file in the office of Engineering News, New York.

ROCK WORK.

150,000 yards of rock work to let on the Barge Canal at Lockport, New York.

UNITED ENGINEERING & CONTRACTING CO.,
17 W. 42d St., N. Y. City.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., February 18, 1910.—Sealed proposals will be received at this office until 3 o'clock p. m., on the 30th day of March, 1910, and then opened, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. Post-Office at Peru, Indiana, in accordance with drawings and specifications, copies of which may be obtained from the Custodian of site at Peru, Indiana, or at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

U. S. ENGINEER OFFICE, Wheeling, W. Va., February 19, 1910.—Sealed proposals for furnishing and erecting steel lock gates and lock-operating mechanism for Dams Nos. 8 and 11, Ohio River, will be received at this office until 11 a. m. (Eastern time), March 21, 1910, and then publicly opened. Information on application. F. W. ALTSTAETTER, Capt., Engrs.

U. S. ENGINEER OFFICE, Savannah, Ga., February 18, 1910.—Sealed proposals for dredging refractory material in Brunswick Harbor, Ga., will be received at this office until 12 noon (Eastern Standard Time), March 21, 1910, and then publicly opened. Information on application. DAN C. KINGMAN, Colonel, Engineers.

Situations Open

MAN, thoroughly acquainted with selling Rock Crushers. Only first-class man may apply, stating age and experience. Address "Z. A. 8," Engineering News, New York. 8-1t

WANTED.—Draftsmen.—A few good draftsmen on blast furnace and general steel construction; Pittsburg location. Address "S. A. 8," Engineering News, New York. 8-3t

WANTED—Superintendent coal mining company, 8 mines, located in southwest; technical graduate, with practical experience, about thirty. Give salary expected, full experience, and references. Address "R. A. 8," Engineering News, New York. 8-2t

WANTED—Civil Engineer, experienced salesman. Apply in writing with references. H. R. HEINICKE, INCORPORATED, 147 Fourth Ave., New York. 8-1t

WANTED—A man to take charge of cost-keeping department for a large contracting firm in New York State. Address "P. A. 8," Engineering News, New York. 8-1t

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Experienced Transit Man for Mine Work

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1 ⅓ McKelvey Mixer, Gasoline Power.
1 No. 1 Ransome Mixer, Steam Power.
1 No. 4 Champion Crushing Plant.
1 No. 15 Champion Crushing Plant with Power.
1 10 ton Pitts Steam Roller.
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